- Water molecule is from polar molecules.
- 4. Rains, clouds, and winds are in the troposphere.

#### Mention one example for :

1. Endangered plant.

2. Fossil of complete body.

3. Petrified fossil.

4. From the green house gases.

#### Question

#### Write the scientific term:

- 1. The atmospheric envelope layer that contains a certain limited amount of helium and hydrogen gases only.
- 2. The environmental system that is not affected severely by the absence of one species of the living organisms that live in it.
- 3. A bond that exists between water molecules.
- 4. The continuous decrease in the numbers of individuals from the same species of living organisms without compensation with birthing.
- 5. The process of conversion of the organic matter of an old living organism into solidified materials, due to replacing the organic matter by minerals.
- 6. Two magnetic belts help in dispersing the harmful cosmic radiation a way from the Earth.

#### B Mention one importance for :

Exosphere region.

2. Altimeter.

3. Silicon.

Foraminafera microfossil.

# Compare between the following:

- 1. Atmospheric pressure and atmospheric air. (Defination only)
- 2. Mesosphere and ionosphere. (Temperature only)

#### Question

#### N Put (√) or (x) and correct the wrong ones:

- 1. Methyl bromide is used in extinguishing fires.
- 2. The ozone layer allows the passage of all ultraviolet rays near and medium.
- 3. The atomic size decreases in periods as the atomic number increases.
- 4. Lacking of plants on Earth leads to the increase in temperature.
- 5. The methane gas and nitrous oxide are considered from the green house gases.
- The Quagga is the most famous extinct kind in the old times.
- Nonmetal oxides are considered as basic oxides.
- The index fossil indicated the age of the sedimentary rocks.

ں بموقع ذاكرولى التعليمي ولا يسمح بتداوله على مواقع أخ

الصف الثاني الاعدادي صح الكول التعليم



# B What happens in the following situations ... ?

- 1. Adding the purple sun flower solution to a jar has a piece of burning coal.
- 2. The passage of electric current through a Hofmann's voltameter containing acidic water.
- 3. Extinction of a species from a balance ecosystem.
- 4. Put a lightening magnesium strip inside a test tube contains oxygen.

# Write the symbolic chemical equations representing the following reactions:

- 1. The reaction between chlorine gas and potassium bromide.
- 2. Dissolving of magnesium oxide in water.

# 2 Cairo Governorate

Al-Waha Language School

#### Answer the following questions:

Question



#### Complete the following statements:

- 1. Moseley located ...... and ..... elements below its table.
- 2. The atomic size of lithium (<sub>3</sub>Li) atom is ...... than that of the nitrogen (<sub>7</sub>N) atom and ...... than that of sodium (<sub>11</sub>Na) atom.
- 3. The bond between hydrogen atom and oxygen atom in water molecule is ...... bond, while bonds among water molecules are ...... bond.
- 4. When the temperature of water decreases than 4°C its ...... decreases, while its volume .......
- 5. Ozone gas is formed in two steps which are:
  - a.  $O_2 \xrightarrow{UV} O + \dots$
- b. O + ..... O<sub>3</sub>
- 6. ..... is the unit used to measure the degree of ozone.
- 7. Meteors burn in ...... layer of atmosphere.
- 8. ..... protectorate is the first established natural protectorate in Egypt.
- 9. During the chemical reaction, metal atom tends to ...... electrons.

# Question

# Calculate the atomic number of the following elements:

- 1. An element is located in the 3<sup>rd</sup> period and group (2 A).
- 2. An element is located in the 3<sup>rd</sup> period and group (7 A).

# B Write the scientific term for each of the following:

- 1. The continuous increase of the average temperature of the air near the surface of the Earth.
- 2. The measuring unit of the atmospheric pressure.
- Fossils are formed as a result of the rapid burying of organisms in a medium that preserved them from decomposing.
- 4. The inert gas, which has the same electronic structure of sodium ion (Na+).
- 5. The bond which is responsible for the abnormal properties of water.
- 6. The weight of air column of an atmosphere height above a unit area.
- 7. The atmospheric layer, in which the ozone layer is located.
- 8. A part from million of million part of metre.
- One of the atmosphere components that its ratio increase in recent years to reach about 0.038 %.
- 10. Traces and remains of old living organisms that are preserved in the sedimentary rocks.
- C Calculate the volume of the gas that evolves at the anode if the volume of the gas that evolves at the cathode is 24 cm.

#### Question

# A Give reasons for :

- El-Mokattam's mountain was a sea floor more than 35 million years ago.
- 2. The desert ecosystem is significantly affected by the absence of one of its species.
- 3. The lower part of stratosphere is suitable for flying aeroplanes.
- 4. Liquefied nitrogen is used in the preservation of cornea of the eye.

# (B) Choose from column (B) what suits in column (A):

(A)	<b>(B)</b>
1. Mesopause	a. protects man's life from ultraviolet rays.
2. Tropopause	b. protect man's life from cosmic radiations.
3. Ozone layer	c. is the region between mesosphere and thermosphere.
4. Van-Allen belts	d. is the region between mesosphere and stratosphere.
5. Ionosphere	e. is the region between stratosphere and troposphere.
6. Stratopause	f. is a layer used in wireless communication. g. its thickness is 13 kilometers.

#### Question

Mow can you differentiate chemically between Copper and magnesium [Using HCI]?

[Write the chemical equation if it is possible]





- B Find the temperature at a point of a height 3 km above sea level if the temperature at sea level is 22°C.
- Locate the position of the following elements in the modern periodic table: [Electronic configuration, group number and period number].
  - 1. Hydrogen (1H).
- 2. Neon (10Ne).
- 3. Calcium (20Ca).

#### Correct the underlined words :

- 1. As we move down in group (7A) the metallic property decreases.
- Electronegativity decreases as we move from left to right in periodic table.
- 3. The first discovered fossil of mammoth were found preserved in amber.
- Distroying the habitat is one of the factors that contribute to species adaptation.

#### Cairo Governorate Manarat AlFarouk Islamic Language School

# Answer the following questions:

#### Question



#### Write the scientific term for each of the following:

- 1. A phenomenon that appears as brightly coloured light curtains seen at both poles of Earth.
- 2. The disturbed atmospheric layer.
- 3. Gradual decrease in the number of living organisms without compensation until all die out.
- 4. Elements, which have more than four electrons in their outermost energy level.
- 5. The weight of air column of an atmospheric height on a unit area.
- 6. The process of replacing the wood material of trees by silica to form petrified woods part by part.
- The descending arrangement of metal elements according to their chemical activity.
- 8. Safe areas, which are established to protect endangered species in their home land.

#### B Give reasons for:

- 1. Fossils are important.
- Ionosphere is important for radio stations.
- 3. Amber is considered as a suitable medium for formation of complete body fossils.

# Question

# Write the balanced chemical equations that illustrate the following reactions:

- 1. Putting a piece of sodium in water.
- 2. Passing chlorine gas in potassium bromide solution.
- Formation of ozone gas.

#### B Choose the correct answer:

- 1. Luminous meteors are formed in ...... layer.
  - a. ionosphere

b. stratosphere

c. exosphere

- d. mesosphere
- 2. The transitional elements start to appear from period .......
  - a. 2

- b. 3
- c. 4
- d. 5

- 3. An example of microfossils is ......
  - a. mammoth.

b. ferns.

c. radiolaria.

- d. archaeopteryx.
- 4. All of the following are greenhouse gases except .........
  - a. CO<sub>2</sub>

- b. O2
- c. N,O
- d. CH<sub>4</sub>

#### Mention one difference between each of the following:

- 1. Simple ecosystem and complicated ecosystem. (Concerning the effect of extinction).
- 2. Group "1 A" and group "7 A".

#### Question



- ⚠ Locate the position of the following elements in the modern periodic table with showing your steps:
  - $1._{19}^{39}$ K
- 2. 27Al
- 3. 19F

# B Rewrite the following sentences after correcting the underlined words:

- 1. Barometer is used to measure the degree of water pollution.
- 2. Ferns fossils indicate that they lived in mild environment.
- When the temperature of water decreases to less than <u>0°C</u>, its density decreases and, so it floats on water surface in the form of ice crystals.
- 4. Most halogens are trivalent metals.

# On electrolysis of a certain volume of acidified water, if the volume of evolved gas above the anode was 2.5 cm<sup>3</sup>:

- 1. Calculate the volume of the evolved gas above the cathode.
- 2. What is the name of the gas that evolves above the anode and above the cathode?
- 3. Mention the name of the apparatus, which is used in this process.

#### Question



# Mhat happens in each of the following cases ... ?

- 1. Storing drinking water in plastic bottles.
- 2. The overuse of methyl bromide as an insectiside.

PART
3

- B Mention one importance for each of the following:
  - 1. Cobalt 60.
- 2. Stratosphere.
- Cross the odd word and write the scientific term that represents the others:
  - 1. Dodo bird / Bald eagle / Mammoth / Quagga.
  - 2. Lithium / Cesium / Sodium / Magnesium.
  - 3. Halons / Nitrogen oxides / Carbon dioxide / Chlorofluorocarbon compounds.

4

#### Cairo Governorate

St. Joseph Maronite Language Schools

#### Answer the following questions:

#### Question



- (A) Complete the following statements:
  - Mendeleev arranged the elements ascendingly according to ......, while Moseley arranged them ascendingly according to .......

  - 3. Sodium is kept under the surface of ...... to prevent it from the reaction with ......
- B Give reasons for each of the following:
  - 1. Petrified woods are considered from fossils although they look like rocks.
  - 2. The lower part of the stratosphere is suitable for flying aeroplanes.
- If the temperature at the foot of a mountain is 40°C. Calculate the temperature at its top if the height of the mountain is 3 km.

#### Question

2

- Write the scientific term:
  - The ability of the atom in the covalent molecule to attract the electrons of the chemical bond towards itself.
  - 2. Traces and remains of the old living organisms that are preserved in sedimentary rocks.
  - A phenomenon that appears as brightly coloured light curtains at both the poles of the Earth.
  - Continuous decrease without compensation in the number of a certain species of living organisms until all die out.
  - 5. The measuring unit of the degree of ozone layer.
  - 6. Part of a million of the million part of a metre.

1	R	Locate	the	position o	of	each	element	in	the	modern	periodic	table	:
м	•	Locuse		Position .						A STATE OF THE STA	A STATE OF THE PARTY OF THE PAR	The state of the s	

1. Calcium (20Ca).

2. Sulphur (16S).

# Mention one importance for :

1. Altimeter.

2. Troposphere layer.

#### Question

3

# What happens in the following situations ... ?

- 1. Putting a magnesium strip in a test tube containing oxygen.
- 2. Dissolving magnesium oxide in water.
- 3. The passage of electric current through Hofmann's voltameter containing acidic water.

#### B Compare between:

1. Mold and cast.

2. Natural and artificial water pollutants.

#### O Define:

1. Van-Allen belts.

2. Greenhouse effect.

#### Question

- Put (✓) or (ϫ):
  - Halogens are from monovalent metals.

    ( )
  - Bohr had discovered the main energy levels.

    (
  - 3. The atomic size decreases in periods as the atomic number increases. (
  - 4. Each period starts with a weak metal.
  - 5. Troposphere contains most of atmospheric envelope. ( )
  - 6. The ozone layer locates at altitude from 20 40 km above sea level. ( )

# B Mention one example for each of the following:

- Extinct bird.
   Most active metal.
- Endangered bird.
   A complete body fossil.

# Write the symbolic chemical equations that illustrate the following reactions:

- 1. Dissolving carbon dioxide in water.
- 2. Putting a piece of sodium in water.

المعاصرعلوم لغات (Notebook) / ۲ع / تيرم ١ (م: ١٦)



# Compare between each in the following:

- Simple ecosystem and complicated ecosystem. (Example)
- 2. Basic oxides and acidic oxides. (According to dissolving in water)
- 3. Group (1 A) and group (7 A). (Related to its name)

Question

# Write the scientific term for each in the following:

- 1. It is the continuous decrease without compensation in the number of a certain species of living organisms until all members of species die out.
- 2. It is a series in which metals are arranged in descending order according to their chemical activity.
- 3. It is the continuous increase in the average temperature of the Earth's near-surface air.
- 4. They are traces and remains of old living organisms that are preserved in sedimentary rocks.
- It is used to measure the atmospheric pressure.
- They indicate the age of sedimentary rocks existed in them.
- 7. It is the number of protons inside the nucleus of the atom of an element.

# B Complete and balance the following equations:

- 1. Mg + ..... MgCl<sub>2</sub> + H<sub>2</sub>†
- 2. CO<sub>2</sub> + H<sub>2</sub>O \_\_\_\_ .....
- 3. Br<sub>2</sub> + 2 KI \_\_\_\_ + ..... + .....

# What will happen in each of the following cases ... ?

- Storing water in plastic bottles.
- Overuse of freon.
- 3. Eating fish contains high concentration of lead.

#### Question

#### Complete the following statements:

- 1. The modern periodic table consists of ...... horizontal periods and ...... vertical groups.
- 2. Archaeopteryx is the link between ...... and ......
- 3. The highest temperature layer in the atmosphere is ......... and the lowest temperature one is .....
- 4. Fossils are used in petroleum ...... and determining the age of ......
- 5. Sodium is kept under the surface of ...... to prevent it from the reaction with ......

#### Question

#### Write the scientific term:

- 1. The scientist who discovered that the nucleus of the atom contains positively charged protons.
- 2. The fossils that are found in the limestone rocks of Mokattam mountain indicate that it was a sea floor since more than 35 million years ago.
- 3. Group of food chains connected with each other.
- 4. The ability of the atom in covalent molecule to attract the electrons of the chemical bond towards itself.
- B Locate the position of each of the following elements in the modern periodic table:
  - 1. <sub>18</sub>Ar

- 2. N
- Write balanced chemical equation representing each of the following:
  - 1. The reaction between magnesium and dilute hydrochloric acid.
  - 2. The reaction between chlorine and potassium bromide.

#### Question

#### Correct the underlined words:

- 1. Mendeleev arranged the elements according to their atomic number.
- Mammoth fossil is an example of microfossils.
- 3. Dobson assumed that the natural amount of the ozone equals 100 Dobson units.
- 4. Alkali metals are bad conductors of heat and electricity.
- B Mention the use (importance) of each of the following:
  - 1. Liquefied nitrogen.
- 2. Van-Allen belts.
- Calculate the temperature at the top of a mountain, if the temperature at the mountain base is 36°C and its height is 4 km.

# Giza Governorate

Lycce El-Haram Language School

#### Answer the following questions:

#### Question



# Complete the following sentences :

- 1. Fossils are often found in ..... rocks.
- The alkali metal elements are ...... valent.
- 3. Mg + 2HCl --- + ......
- 4. Bromine replaces ..... in its salt solution.

Mold and trace. (In view of their definitions and example for each)

2. Aneroid and altimeter. (In view of their usage)

# Question

- Write the scientific term for each of the following statements:
  - 1. It is the ability of an atom in the covalent compound to attract the bonded electrons to itself.
  - Fossil links between reptiles and birds.
  - 3. Phenomenon appears as brightly coloured light curtains at both the north and the south poles of the Earth.
  - 4. Continuous increase of the average temperature of the air near the surface of the Earth.
  - 5. A kind of water pollution results from mixing of humans and animals wastes with water.
  - 6. Measuring unit of ozone degree.
- Mention one importance :
  - 1. Liquefied nitrogen.
- 2. Ozone layer.
- 3. Index fossils.
- Explain the effect of extinction of a species of living organisms on simple ecosystem and complicated ecosystem.
  - Giza Governorate

Talaee Islamic Language School

#### Answer the following questions:

#### Question

- Complete the following statements:
  - 1. The number of groups in p-block is ..... in modern periodic table.
  - 2. Sodium reacts with water to produce ...... gas.
  - 3. From the pollutants of ozone layer are ......, ....., and ......
  - 4. The measuring unit of atmospheric pressure is ......, while the measuring unit of ozone degree is ......
- Calculate the temperature at the sea level if the temperature at height of 7500 m above sea level is (-15°C).
- What's meant by ... ?
  - 1. Greenhouse effect.

2. Fossils.

Question

- Mrite the scientific term for each of the following statements:
  - 1. Element, which is used in food preservation.
  - 2. The region in which satellites orbit around the Earth planet.
  - 3. It is the curved lines that join the points of equal pressure in atmospheric pressure maps.

127

هذا العمل خاص بموقع ذاكرولي التعليمي ولا يسمح بتداوله على مواقع أخرى



الصف الثاني الاعدادي ص الم الكرال التعليم

- Two magnetic belts surrounding ionosphere and play an important role in scattering harmful charged cosmic radiation.
- 5. A bond that exists between water molecules.
- B How can you differentiate between each of the following ...?
  - 1. Copper and magnesium. (Use a balanced equation)
  - Carbon dioxide and sodium oxide.

Question

3

#### A Choose the correct answer:

- 1. Fossils are found in ..... rocks.
  - a. metamorphic
- b. sedimentary
- c. igneous
- d. no correct answer

- is from the recent extinction animal.
  - a. Mammoth
- b. Panda bear
- c. Quagga
- d. Bald eagle

- 3. Meteors are formed in ..... layer.
  - a. ionosphere
- b. stratosphere
- c. mesosphere
- d. troposphere
- 4. The devices, which is (are) used in measuring the atmospheric pressure is (are) ......
  - a. ammeter.
- b. aneroid.
- c. altimeter.
- d. (b) and (c).

- Mention one difference between:
  - 1. Mold and cast.

- 2. Positive ion and negative ion.
- Mention by the chemical equation the effect of adding:
  - 1. Bromine to potassium iodide.
- 2. Dilute hydrochloric acid to carbon.

Question

4

- A Give reasons for :
  - 1. Occurrence of old extinction.
  - 2. Ozone layer is formed in stratosphere.
  - 3. Elements of the same group have similar chemical properties.
  - 4. Pure water has no effect on litmus paper.
- B Locate the position of the following element in the modern periodic table:
  - $1.({}_{2}X)$

2. (20Y)

- $3.(_{8}Z)$
- O Put (√) in front of the correct statements and or (x) in front of the wrong ones and correct the incorrect ones:
  - 1. Water and ammonia are non-polar compounds.

- ( )
- Water and ammonia are non-polar compounds.
   Eating fish which contain high percentage of lead causes blindness.
- ( )
- 3. Liquefied sodium is used in the preservation of the eye cornea.

,

128

بذا العمل خاص بموقع ذاكرولي التعليمي ولا يسمح بتداوله على مواقع أخرى والعمولية

#### Giza Governorate

Official Language Schools

#### Answer the following questions:

Question



#### Complete the following sentences:

- 1. Mendeleev arranged the elements ascendingly according to ....., while Moseley arranged them ascendingly according to ......
- 2. The highest temperature layer in the atmosphere is ......... and the lowest temperature one is .....
- 3. ..... bear is one of the most endangered species.
- 4. Elements of group (1A) are called ........
- 5. Ultraviolet rays (UV) have ..... effect, while infrared rays have ..... effect.
- Most of weather features occur in ...... layer.
- B Locate the position of these elements in the modern periodic table :

1. 20Ca

2. 10Ne

- Mention one example for each of the following:
  - 1. A metalloid element.
- A greenhouse gas.
- 3. Extinct species.

#### Question



# Write the scientific term for each of the following:

- 1. The death of all members of species of living organisms.
- The metalloid that is used in manufacture of electronics such as computer.
- 3. A phenomenon that appears as brightly coloured light curtains at the north and south poles of Earth.
- 4. The elements which have the properties of both metals and nonmetals.
- 5. The arrangement of elements in a descending order according to their chemical activity.
- 6. Two magnetic belts that help in scattering of harmful cosmic radiations away from the Earth.
- B Mention one use for each of the following elements in modern technology:

1. Cobalt 60.

2. Altimeter

3. Ozone layer

(C) If the temperature at the sea level equals 30°C, find the temperature at a height of 4 km. above the earth's surface.

المعاصرعلوم لغات (Notebook) / ٢ع / تيرم ١ (٩: ١٧)

129

هذا العمل خاص بموقع ذاكرولى التعليمي ولا يسمح بتداوله على مواقع أخرى إ الصف الثاني الاحدادي صحيحاكاكي الشعابيم

# Giza Governorate

Pyramids Language Schools

#### Answer the following questions:

#### Question



#### Write the scientific term:

- 1. Elements which have the properties of both metals and nonmetals.
- 2. Series in which metals are arranged in a descending order according to their chemical activity.
- 3. Thinning or losing parts of ozone layer above the south pole.
- 4. It is a region in which the atmospheric envelope is inserted with outer space.
- They are safe areas established to protect endangered species in their homeland.

#### B Mention one function for :

1. Van-Allen belts.

2. Liquefied nitrogen.

#### Choose the odd word from the following:

- Nitrogen oxides Water vapour Halons Methyl bromide.
- Quagga Dodo bird Dinosaur Bald eagle.

#### Question



#### Complete the following :

- 1. Both sodium (11Na) and potassium (19K) are located in the same ...... because they have the same number of ......
- 2. Mesosphere layer is highly rarefied because it contains limited quantities of ......... and ..... gases only.
- 3. Water has the ability to dissolve some of covalent compounds such as ......, because it can form ..... bond with water molecules.
- 4. ..... is a type of barometer used to determine the day weather, while ...... is used to measure the elevation from sea level.

#### B Give reasons for:

- 1. By increasing the atomic number among groups, the atomic size increases.
- 2. Adding few drops of dilute sulphuric acid to water during its electrolysis by Hofmann's voltameter.

# Mention one harm for the following :

1. Global warming.

2. Biological pollution.

PART

Question

# Correct the underlined word:

- 1. Elements of group 1A are known as halogens.
- Covalent bond is a weak electrostatic attraction force which arises among water molecules.
- 3. Mammoth is one of the examples of petrified fossils.
- 4. Coral fossils indicate that the environment where they lived was hot and rainy tropical environment.
- B Problem: Calculate the height of a mountain if temperature at its base is 30°C and at its top is - 9°C.

# What will happen if ...?

- Adding some water to magnesium oxide followed by drops of violet litmus solution.
- The resinous matter, which was secreted by pine trees falls on an insect.

Question

#### Choose the correct answer:

- 1. Most of alkali metals have ...... density.
  - a. low

b. high

- c. same
- 2. The scientist who discovered that the nucleus of the atom contains positively particles is .....
  - a. Mendeleev.
- b. Bohr.

c. Rutherford.

- 3. Pilots prefer to fly their planes in ......
  - a. exosphere.

- b. stratosphere.
- c. thermosphere.
- 4. ..... is one of the most important reasons of the recent extinction age.
  - a. Volcanic eruption
- b. Long glacial age
- c. Overhunting
- 5. The unit which used to measure ozone degree is .........
  - a. Dobson.

b. millibar.

- c. nanometer.
- B Compare between simple and complicated ecosystems (definition only).

# Complete the following equations:

- 1. 2H<sub>2</sub>O Electrolysis ..... + .....
- 2. Br<sub>2</sub> + 2Kl ---- + ·······

# 11 Alexandria Governorate

East Educational Zone

#### Answer the following questions:

Question



- Complete the following statements:

  - 2. Non-metal oxides dissolve in water forming ......, which turn the litmus solution into ........

  - 4. The atmospheric pressure ...... by increasing the length of air column.
  - 5. Fluorine and chlorine exist in a ...... state, while iodine exists in a ...... state.
- B What is meant by ...?
  - 1. Aurora phenomenon.
  - 2. Electronegativity.
- Write the symbolic balanced chemical equations that illustrate the following reactions:
  - 1. Reaction of chlorine gas with potassium bromide solution.
  - 2. Reaction of sodium with water.

#### Question

2

- Write the scientific term:
  - 1. What an old living organisms left during its life indicating its activity.
  - The region between stratosphere and mesosphere and at which the temperature remains constant.
  - 3. A charged layer, which reflects radio waves.
  - 4. The continuous increase in the average temperature of the Earth's near-surface air.
  - Elements, which have the properties of metals and nonmetals.
  - Fossils used in determination of the age of sedimentary rocks.
- B Locate the position of the following elements in the modern periodic table:

1. 19K

2. <sub>2</sub>He

Find temperature at a point of height 10000 meters above sea level if temperature at the sea level is 24 C.

Water pollution	Kind of pollution	Harms	
1. Discharging of factories wastes in rivers.	***************************************	Blindness.	
2	Biological pollution.		
Using some water areas in cooling of nuclear reactors.		Destruction of the marine organisms.	

هذا العمل خاص بموقع ذاكرولي التعليمي ولا يسمح بتداوله على مواقع

12 Alexandria Governorate

El-Agamy Educational Zone

#### Answer the following questions:

Question

П

Complete the following statements:

 Mendeleev arranged the elements ascendingly according to ......, while Moseley arranged them ascendingly according to .......

2. Ultraviolet rays have ...... effect, while infrared rays have ...... effect.

4. ..... and ..... are metals, which don't react with water.

5. Archaeopteryx represent the link between ...... and ......

#### B Give one use for :

1. Cobalt 60.

2. Van-Allen belts.

#### Question

2

#### Mrite the scientific term:

1. Elements having the properties of metals and nonmetals.

2. A water pollutant which causes the death of brain cells.

Traces and remains of old living organisms that are preserved in sedimentary rock.

4. A charged layer reflect radio waves.

5. A phenomenon that appear as bright colours at the two poles.

B Find the temperature at the top of a mountain its height is 3 km, if temperature at the sea level is 20°C.

#### Question

3

#### (A) Choose the correct answer:

1. All the following are endangered species except .........

a. panda bear.

b. bald eagle.

c. quagga.

d. rhinoceros.

2. From gaseous elements in group (7 A) is (are) .........

a. chlorine.

b. iodine.

c. fluroine.

d. (a) & (c) together.

3. The ozone degree is measured in a unit called .........

a. km.

b. °C.

c. Dobson.

d. millibar.

4. Complete body fossils of insect are found preserved in ......

a. ammonites.

b. amber.

c. snow.

d. igneous rock.

5. Meteors are formed in ...... layer.

a. mesosphere

b. ionosphere

c. exosphere

d. stratosphere

الصف الثاني الاعدادي صح الكوالي التعليم كتاب الم

2. Sodium oxide is	from oxides.		
a. amphoteric	b. acidic	c. basic	
3. When water free	ezes, its density		
a. increases.	b. decreases.	c. doesn't change.	
4. When sodium re	eact with water	gas evolves.	
a. O <sub>2</sub>	b. CO <sub>2</sub>	c. H <sub>2</sub>	
What is the result	of the following	?	
1. Presence of Van		2. Storing water in plastic bottles.	
© Calculate the heightop is – 6°C.	ht of the mountain i	if the temperature at the base is 30°	°C and at its
Question 3			
Write the scientifi	c term :		
1. The vertical colu	umns in Mendeleev's	table.	
2. The region when	e the atmospheric en	velope is inserted in outer space.	
3. A solid halogen.			
B Write the symbolic	balanced chemical	equations that illustrate the followin	g reactions :
	dill hydrochloric aci		A CONTRACTOR OF THE PERSON OF
2. Chlorine gas wit	h potassium bromide	solution.	
O Study the opposit	e figure, then answe	r: (	A
1. Locate the positi	ion of element 11B		нВ Е
2. What are the ato	mic number of eleme	nts E, C in modern periodic table ?	C
Question 4			D
A Put (√) or (×) and	d correct :		
1. The air moves he	orizontally in the lowe	er part of the stratosphere.	( )
<ol><li>Copper metal do</li></ol>	esn't react with water		( )
3. Halogens are mo	novalent metals.		( )
4. The unit of meas	suring atomic radius is	s Dobson unit.	( )
B Give reasons for:			
1. Ammonia is cons	sidered as a polar cov	alent compound.	
2. The atomic size	of 11 Na is greater than	1 <sub>17</sub> Cl.	
Explain the role of	ultraviolet rays in fo	ormation of ozone gas.	
		علوم لغات (Notebook)/۲ع/تیرم ۱ (۲ : ۱۸)	المعاصرة

هذا العمل خاص بموقع ذاكرولي التعليمي ولا يسمح بتداوله على مواقع أخرى والمعلقة

الصف الثاني الاعدادي (مرتع الكريل التعليم) كتاب المعاصر

The modern periodic table consists of ...... horizontal periods.

a. 7

b. 10

c. 14

d. 18

3. Atmospheric pressure is the ...... of air column of an atmospheric height on a unit area.

a. mass

b. volume

c. weight

d. density

4. Ozone layer is found in ..... layer.

a. troposphere

b. stratosphere

c. mesosphere

d. thermosphere

5. ..... is an example of microfossils.

a. Mammoth

b. Ferns

c. Foraminifera

d. Archaeopteryx

#### B Give reasons for:

1. Sodium is kept under the surface of kerosene.

2. Liquefied nitrogen is used in the preservation of cornea of the eye.

3. The continuity of the ozone layer erosion.

#### What is meant by ...?

1. Polar compound.

2. Water pollution.

#### Question

#### A Correct the underlined words :

Each period ends with a nonmetal.

2. Chemical pollution of water causes many diseases as typhoid and hepatitis.

Infrared radiation has a chemical effect.

4. Panda bear is considered from extinct species.

Ozone degree is measured in a unit nanometer.

# B Mention one example for :

1. Petrified fossils.

2. Natural protectorate found in South Sinai in Egypt.

3. An alkali metal that is kept under surface of paraffin oil only.

# What happens when ...?

1. Adding the purple sunflower solution to a jar has a piece of burning coal.

2. The pollution of water with animals and human wastes.

# **Sharkia Governorate**

Formal Language Schools

# Answer the following questions:

Question

# Complete the following sentences:

1. From the extinct animals in the old ages ...... and .....

139

هذا العمل خاص بموقع ذاكرولي التعليمي ولا يسمح بتداوله على مواقع أخرى الصف الثاني الأعدادي صريح الكرالي التعليم

Write the symbolic chemical equations for the following reactions	ns :
---	------

- 1. Dissolving of magnesium oxide in water.
- 2. The reaction between chlorine gas and potassium bromide.
- 3. The electrolysis of water.
- Calculate the height of mountain if the temperature at its foot is 30°C and at its top is (-9°C).

Question

4

#### Put (√) or (x) and correct the wrong ones:

- 1. The number of known elements till now is 92 elements.
  - Each period starts with a weak metal.
  - 3. The pilots prefer to fly in mesosphere. (
  - 4. Papyrus is considered as an extinct plant.
- (B) Compare between troposphere and mesosphere layers.
- Explain the effect of extinction of species of living organisms on :
  - 1. Simple ecosystem.

Complicated ecosystem.

# 16 El-Menofia Governorate

Shebin El-Kom Educational Administration

#### Answer the following questions:

Question



# Write the scientific term for each of the following:

- 1. The elements which have the properties of both metal and nonmetal.
- 2. The ability of the atom to attract the electrons of the chemical bond to itself.
- A molecule is formed from combining an atom of element with molecule of the same element.
- 4. They are traces and remains of old living organisms that are preserved in sedimentary rocks.
- 5. Weight of air column of an atmospheric height on unit area.
- 6. They are safe areas established to protect endangered species in their homeland.
- B Locate the position of the following in the modern periodic table :

(Period, group and its block)

1. <sub>2</sub>X

2. oY

# Answer the following:

- 1. If the temperature at the sea level is 30°C, Calculate the temperature at a height of 500 m.
- 2. Write the balance chemical equation which express:
  - (a) Reaction of bromine with potassium iodide.
  - (b) Electrolysis of water.

141

ذا العمل خاص بموقع ذاكرولي التعليمي ولا يسمح بتداوله على مواقع أخرى والعمولية

Question	4

A	Choose	the	correct	answer:
---	--------	-----	---------	---------

- 1. From microfossils ......

  - b. foraminifera. a. ferns.
- c. radiolaria.
- d. (b) and (c).
- 2. Increasing the concentration of ...... in drinking water cause blindness.
  - a. lead

- b. arsenic
- c. mercury
- d. chlorine
- 3. The temperature at the top of mesosphere layer reachs .........
  - a. 100°C
- b. 60°C
- c. 90°C
- d. 1200°C
- 4. Ozone layer allows 100% of ...... ultraviolet rays to penetrate.
  - a. near

- b. medium
- c. far
- d. (a, b)
- 5. Complete body fossils of insects found preserved in ........
  - a. ammonites.
- b. igneous rocks.
- c. snow.
- d. amber.
- 6. Atmospheric pressure at tropopause equal ...... mb.
  - a. 100

- b. 1000
- c. 0.01
- d. 0.001

#### B Put ( ) or ( ) and correct the wrong ones :

- 1. Overuse of methyl bromide as insecticide causes increasing of erosion of ozone layer. (
- Hydrogen evolves at positive pole in Hofmann's voltameter.
- Burning carbon produces basic oxide.
- 4. Coral fossils indicate that their environment was clear warm shallow seas.

# C Answer the following:

- 1. Compare between fluorine and cesium.
  - (Concerning the atomic size and the kind of the formed ion)
- 2. What are the reasons of the extinction in recent ages? (Write two reason only)

# Ismailia Governorate

Science Inspectorate

# Answer the following questions:

#### Question



# Complete the following sentences with suitable words:

- 1. The suitable medium to from a mammoth fossil is .........
- 2. Mendeleev arranged the elements in an ascending order according to their ....., while Mosely arranged them ascendingly according to ......
- 3. Fluorine and chlorine are found in ...... state.
- 4. ..... is the first protectorate established in Egypt.



- 5. From the pollutants of ozone layer are ...... compounds that are used in air conditioner sets.
- 6. Increasing the concentration of mercury in drinking water causes .........
- 7. The highest temperature layer in the atmosphere is the ....., while the ...... layer is the most thin one.
- 8. Metal oxides are ...... oxides, while nonmetal oxides are ..... oxides.

# B Write the number which indicates each of the following:

- 1. The number of blocks in the modern periodic table.
- 2. The number of oxygen atoms in ozone molecule.
- 3. The normal atmospheric pressure at the sea level (in mb).

#### Question

#### Give reasons for:

- 1. Ozone layer is formed in stratosphere.
- 2. Petrified woods are considered as fossils although they look like rocks.
- 3. The atomic size of the elements of the same group increases by increasing their atomic number.
- 4. The simple ecosystem is affected strongly by the absence of one of its species.

#### B) Write the scientific term:

- 1. The continuous increase in temperature of the Earth's near-surface air.
- 2. A series in which metals are arranged in a descending order according to the chemical activity.
- 3. The region between stratosphere and mesosphere at which temperature remains constant.
- 4. The radioactive element used in food preservation.

# Complete the following equations:

- 1. 2Na + 2HOH ---- + H<sub>2</sub>
- 2. Br<sub>2</sub> + 2Kl → ······· + I<sub>2</sub>

#### Question

# Choose the correct answer for the following:

- 1. All the following metals react with water except .......
  - a.K

- b. Cu
- c. Na
- d. Mg
- Ozone layer doesn't allow the passage of ...... ultraviolet rays.
  - a. near
- b. medium
- c. far
- d. no correct answer
- 3. There are ..... bonds between water molecules.
  - a. hydrogen
- b. covalent
- c. ionic
- d. all the previous

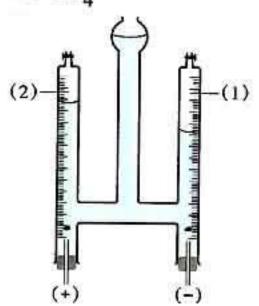
هذا العمل خاص بموقع ذاكرولى التعليمي ولا يسمح بتداوله على مواقع أخرى

- 4. Ionosphere is surrounded by ...... belts.
  - a. electric
- b. magnetic
- c. thermal
- d. no correct answer

- 5. Fossils are found in ..... rocks.
  - a. igneous
- b. sedimentary
- c. metamorphic
- d. all the previous
- 6. All the following gases are greenhouse gases except .........
  - a. CO2
- b. O

- c. N<sub>2</sub>O
- d. CH

- B From the opposite figure, answer the following questions:
  - 1. This apparatus is called ......
  - 2. Label the figure.
  - 3. Find the volume of gas (1) if the volume of gas (2) is 10 cm<sup>3</sup>.

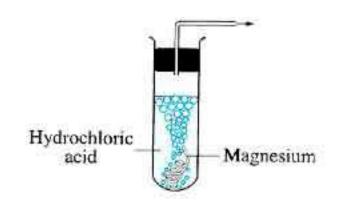


- Cocate the position of each of the following in the modern periodic table:
  - 1. <sub>12</sub>Mg

2. 19K

# Question

- N Put ( / ) in front of right statement and ( x ) in front of wrong one :
  - 1. Establishing gene banks is a way to protect living organisms from extinction.
  - 2. Chemical activity of group 1 A elements increases as atomic size increases.
  - 3. Water molecule is a non-polar compound.
  - 4. Ferns fossils indicate that the environment where they lived was a sea floor.
  - Methyl bromide gas is used as insecticide.
  - 6. Density of ice is more than that of water.
  - 7. Stratosphere is the coldest layer in the atmosphere.
- B Mention one example of the following:
  - 1. Old extinct animal.
- 2. Endangered plant.
- 3. Alkali metal element.
- If the temperature at the base of a mountain is 40 C°, find the temperature at its top if its height is 2 Km.
- D Examine the figure, then answer the questions:
  - 1. Write the chemical equation represents the reaction.
  - 2. What the name of the produced gas ?



المعاصر علوم لغات (Notebook) / ٢٤ / تيرم ١ (١٩١٢)

145

هذا العمل خاص بموقع ذاكرولى التعليمي ولا يسمح بتداوله على مواقع أخرى المعن الثعليمي الاعدادي المعالمي المعالمي المعالمي المعالمين الاعدادي المعالمين المعال





(A)	<b>(B)</b>
Altimeter     Thermosphere     Troposphere     Stratosphere	<ul> <li>a. the layer that has all weather phenomena.</li> <li>b. a suitable layer for aeroplanes flying.</li> <li>c. a device used to measure the altitude of planes.</li> <li>d. the hottest layer in the atmospheric envelope.</li> </ul>

#### B What happens when ...?

- 1. Drinking water polluted with mercury.
- 2. Increasing the ratio of greenhouse gases in the atmosphere.
- Adding the violet litmus solution to a jar has a piece of burning coal.
   (write the symbolic balanced equation).

# Put (√) in front of the correct statement and (x) in front the incorrect one, then correct the wrong ones:

- 1. Panda bear is an example of extinct species.
- 2. The main energy levels had discovered by Bohr. ( )
- 3. Ultraviolt radiation has a thermal effect.

  4. The mold is a copy of external shape of the shell.

  ()

# Question 4

# (A) Choose the correct answer for the following:

- 1. ..... is an example of complete body fossils.
- a. Mammoth b. Ferns
- 2. ..... react very slowly with cold water.
  - . ..... react very slowly with cold water
  - a. K and Na b. Ca and Mg
- c. Zn and Fe

c. Coral

d. Cu and Ag

d. Foraminifera

- 3. ..... is an example of endangered living organisms.
  - a. Mammoth
- b. Dodo
- c. Dinosaur
- d. Bald eagle

- 4. The snow crystal has ...... shape.
  - a. octagonal
- b. hexagonal
- c. pentagonal
- d. quadrilateral

# B Look at the opposite figure, then answer:

- 1. Mention the name of the apparatus.
- 2. Label the figure.
- 3. Calculate the volume of the gas that evolves at the positive pole if the volume of the gas at the negative pole is 20 cm<sup>3</sup>

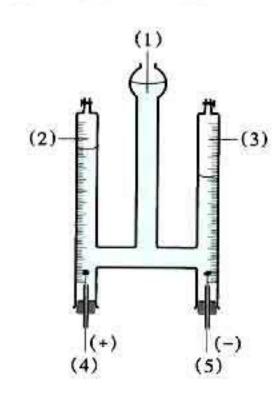
# What is the importance of the following ...?

1. Liquefied nitrogen.

2. Nummulite fossil.

3. Silicon.

4. Aneroid.



PART

# 19 Damietta Governorate

Official Language Schools

# Answer the following questions:

Question

A

# Complete the following sentences:

- 1. Each period in the modern periodic table starts with ........ and ends with ......
- There are ...... bonds between water molecules, while the bonds between atoms in water molecules are ..... bonds.
- 3. Archaeopteryx represents the link between ...... and .......
- Ionosphere is surrounded by two magnetic belts known as ...... belts that play an important role in .......
- Alkali metals are located in group ...... but halogens are located in group ...... in the modern periodic table.

# B Mention the importance of each of the following:

- 1. Ozone layer.
- 2. Altimeter.
- Liquefied nitrogen.

# C Locate the position of the following elements in the modern periodic table : (With drawing)

1. 16S

2. <sub>13</sub>Al

3. 10 Ne

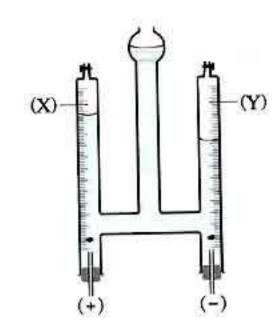
# Question

# Write the scientific term for the following:

- 1. The ability of atom in covalent molecule to attract the bond electrons to it.
- 2. Continuous increase of the average temperature of the air near the surface of the Earth.
- 3. The death of all members of certain species of living organisms.
- 4. A type of ultraviolet radiations that is absorbed mostly (95%) in the ozone layer.
- 5. Safe places established to protect endangered species in their natural environment.
- 6. A block in the periodic table that contains groups from (3A) to (7A).

# B From the opposite figure, answer the following:

- 1. What's the name of this apparatus?
- 2. Letter (X) on the figure represents ......
- Letter (Y) on the figure represents .........
   Write the symbolic balanced chemical equation.



148

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Calculate the temperature at the top of a mountain if its height is 4 km and the temperature at its foot is 30°C.

Question

#### Choose the correct answer:

- 1. The scientist who discovered the main energy levels is .......
  - a. Moseley.
- b. Bohr.
- c. Hofmann.
- d. Mendeleev.
- is considered the midway between horse and zebra.
  - a. Quagga
- b. Bald eagle
- c. Panda bear
- d. Rhinoceros

- 3. The coldest atmospheric layer is ......
  - a. troposphere.
- b. stratosphere.
- c. mesosphere.
- d. thermosphere.
- 4. Complete body fossils of insects are found preserved in ........
  - a. ammonites.
- b. amber.
- c. igneous rocks.
- d. ambergris.

- 5. .... react very slowly with cold water.
  - a. K and Na
- b. Cu and Ag
- c. Zn and Fe
- d. Ca and Mg

# B Write the symbolic balanced chemical equations which express the following reactions:

- 1. Dissolving of magnesium oxide in water.
- 2. Carbon dioxide with water.
- Bromine with potassium iodide.

#### Mention the harms of:

Storing water in plastic bottles.

- 2. Far ultraviolet rays on human.
- 3. Drinking water contains high concentration of mercury.

# Question

#### Give reasons for :

- 1. The lower part of stratosphere is suitable for flying aeroplanes.
- 2. Rhinoceros is from the endangered species.
- 3. Ionosphere layer is important for wireless communications.
- 4. Sodium fires do not put off with water.

# B) What is meant by ...?

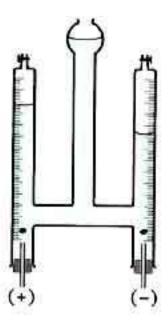
- 1. Dobson.
- 2. Chemical Activity Series.
- 3. Petrification.

# Correct the underlined words:

- 1. Infrared radiations has a chemical effect.
- 2. Panda bear is considered from extinct species.
- Meteors burn in thermosphere layer.

# B Study the opposite figure , then answer the following questions :

- 1. Mention the name of this apparatus.
- 2. Write the chemical equation that shows the chemical reaction.
- 3. What is the volume of gas which burns with a pop sound when you approach a glowing splint to it if the volume of the other gas is 6 cm<sup>3</sup>?



#### Give reasons for :

- 1. Elements of the same group have similar properties.
- 2. Liquefied nitrogen is used in the preservation of the cornea of the eye
- 3. The lower part of stratosphere is suitable for flying aeroplanes.

# Question

### Write the scientific term:

- 1. The descending arrangement of elements according to their chemical activity.
- Traces and remains of living organisms that are preserved in sedimentary rocks.
- 3. Decrease in the thickness of the ozone layer.
- 4. The two magnetic belts that help in dispersing the harmful cosmic radiation.
- The ability of the atom to attract the electrons of the chemical bond towards itself.
- The radioactive element which is used in food preservation.

# B Locate the position of the following elements in the modern periodic table:

- $1.({}_{19}K)$
- 2. (oF)
- $3.(_{5}B)$
- 4. (10Ne)

# C Compare between:

Simple ecosystem and complicated ecosystem. (according to : Number of members - example)

# Question

# N Put (√) or (x) in front of each of the following:

- 1. The air moves vertically in the troposphere layer.
- 2. Ice crystals have pentagonal shapes.
- 3. In the period, as the atomic number increases the metallic property increases.
- 4. The fossil record indicates the age of the sedimentary rocks.
- 5. The ozone degree is measured by unit called Dobson.

# B Calculate the height of a mountain if the temperature at its base is (30°C) and the temperature at its top is (- 9°C).

# Write the symbolic balanced chemical equations which express the reaction of :

- Carbon dioxide with water.
- Magnesium with dil. hydrochloric acid.

21 El-Behira Governorate

Ismail Elhabrouk Formal Language School

# Answer the following questions:

#### Question

- Complete the following statements:
  - 1. The atomic size is measured by ......, but the atmospheric pressure is measured by ......
  - Eating fish which contains high ratios of lead causes ........., but drinking water which contains high ratios of mercury leads to ..........
  - 3. Ultraviolet radiation has a ...... effect, but the infrared radiation has a ...... effect.
  - 4. From the examples of complete body fossils are ...... and ......
- B What happens in each of the following cases ... ?
  - Decreasing water temperature to 2° C.
  - Increasing the ratio of nitrogen oxides in the atmosphere.
  - 3. Silica matter replaces wood material part by part of an old tree.
- Calculate the height of mountain if the temperature at its bottom is (30°C) and at its top (-9°C).

#### Question

2

- Write the scientific term for each of the following:
  - It is a series in which metals are arranged in a descending order according to their chemical activity.
  - 2. A region separates between stratosphere and mesosphere where temperature is rather constant.
  - 3. Fossils of the organisms that lived a short period of time in the past and become extinct.
- (B) Mention one use or importance for each of the following:
  - 1. Liquified nitrogen.

- 2. Altimeter.
- Halons.
- From the opposite table which represents the properties of four elements, mention the symbol which represents an element from :

  | Density | Property | Pr
  - Alkali metal ......, then indicates its group in periodic table.
  - Halogen ......, then indicates its group in periodic table.
  - A metal ...... its oxide dissolves in water to from magnesium hydroxide.

(Show the balanced chemical equation)

Element symbol	Behaviour with water	state	gm/cm <sup>3</sup>
A	dissolve	gas	0.003
В	react	solid	3.59
С	react instantly	solid	0.86
D	react very slowly with cold water	solid	

152

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# Question

#### Choose the correct answer :

- Degree of ozone under STP condition is ....... Dobson.
  - a. 100

- b. 200
- c. 300
- d. 400

- 2. Fossils are found in ..... rocks.
  - a. metamorphic
- b. sedimentary
- c. igneous
- d. volcanic

- 3. Inert gases are located in the ...... block.
  - a.s

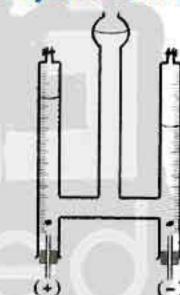
- b.p
- c. d
- d.f
- 4. ..... protectorate is the first natural protectorate in Egypt.
  - a. Saint Catherene
- b. Ras Mohamed c. Wadi Hetan
- d. Petrified forest

#### B) Give reasons for:

- Ionosphere is important for wireless comunications.
- 2. High boiling and freezing point of water.
- 3. Removing trees of tropical forests is one of the most important factors of extinction.

### From the opposite figure which illustrates Hofmann's voltameter used in electrolysis of water:

- 1. Write the chemical equation which illustrates the chemical reaction?
- 2. What is the volume of gas which burns with a pop sound when you approach a glowing splint to it if the volume of the other gas is 5 cm<sup>3</sup>?
- 3. Write the name of elements, which are collected at the cathode and anode.



#### Question

### Correct the underlined words in the following statements:

- 1. Mammoth represents a link between reptiles and birds.
- 2. Panda bear is considered from extinct species.
- 3. Meteors burn in thermosphere layer.
- 4. Methane molecule is considered as a polar molecule.

# B Compare between:

1. Mendeleev's periodic table and Moseley's periodic table.

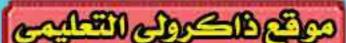
(In terms of scientific principle of arranging elements)

Simple ecosystem and Complicated ecosystem.

(In terms of: No. of members - example for each)

المعاصرعلوم لغات (Notebook) [ ٢٠ ] أتيرم ١ (٢٠: ٢)





PART

# Mention one example for :

- 1. A gas from greenhouse gases.
- 2. The most active metal.
- 3. An element doesn't react with water.
- 4. Type of fossils is considered as a guide for existence of petroleum well.

# 22 El-Minia Governorate

Minia Kawmia Language School

### Answer the following questions:

#### Question



#### Choose the correct answer:

- is the region between stratosphere and mesosphere.
  - a. Thermopause
- b. Mesopause
- c. Stratopause
- d. Tropopause
- Increasing the concentration of ..... in drinking water causes blindness.
  - a. mercury
- b. lead
- c. arsenic
- d. chlorine

- 3. ..... is an example of microfossils.
  - a. Mammoth
- b. Ferns
- c. Archaeopteryx
- d. Foraminifera
- 4. The scientist ...... had discovered the main energy levels.
  - a. Moseley
- b. Bohr
- c. Hofmann
- d. Mendeleev

- 5. Ozone degree is measured in a unit called .........
  - a. km.
- b. mm<sup>2</sup>
- c. nm.
- d. Dobson.

# B Mention one use of each of the following:

1. Liquified nitrogen.

- 2. Hofmann's voltameter.
- 3. Methyl bromide gas.

# Mention one example of :

1. Endangered plant

2. Simple ecosystem.

### Question

# Write the scientific term for each of the following sentences:

- Fossils formed by the replacement of wood part by part keeping its shape without change.
- The continuous increase in the average temperature of air near the surface of the Earth.
- 3. A bond that exists between water molecules.
- 4. The curved lines that join the points of equal pressure in atmospheric pressure maps.

#### B Give reasons for :

- 1. Ionosphere is important for radio stations.
- 2. Elements of group (7 A) are known as halogens.
- 3. Ammonia (NH<sub>3</sub>) is considered as a polar compound.
- 4. Formation of ozone layer in the stratosphere layer.

#### Question

3

### (A) Choose from column (B) what suits in column (A):

(A)	(B)
1. Corals	a. is a link between reptiles and birds.
2. Ferns	b. indicate the evolution from simple to complicated life.
Nummulites     Archaeopteryx	c. are fossils that indicate that the environment, where they lived was a hot and rainy tropical.
	d. are fossils that indicate that the environment, where they lived was clear warm shallow seas.
	<ul> <li>e. are fossils that indicate this area was a sea floor more than 35 million years ago.</li> </ul>

### B Write the balanced chemical equations that illustrate the following reactions:

- 1. Reaction of chlorine gas with potassium bromide solution.
- 2. Magnesium with dilute hydrochloric acid.
- 3. Carbon dioxide with water.
- C Calculate the height of a mountain if the temperature at its base is (30°C) and at its top is (-9°C).

#### Question

4

# **(A)** Correct the underlined words:

- Reproduction is the continuous decrease without compensation in the number of a certain species of living organisms until all members of species die out.
- 2. Magnesium oxide is an acidic oxide.
- 3. Amber is an example of mold.
- 4. The atomic size decreases in the same group by increasing the atomic number.

# B Compare between:

The groups and periods (Two points enough).

# What happens when ...?

- 1. The pollution of water with animal and human wastes.
- 2. Overuse of freon.

3. Reaction of sodium with water.



# Question

- Give reasons for:
  - 1. Establishing the natural protectorates.
  - 2. Water is a polar compound.
  - 3. The high boiling point of water.
  - 4. Stopping manufacturing of ultrasound concorde aeroplanes.
  - Mesosphere layer is highly rarefied layer.
  - 6. Scientist thought about classification of elements.
- B Write the symbolic chemical equation that indicates the following reactions:
  - 1. Reaction of chlorine gas with potassium bromide.
  - 2. Magnesium with dilute hydrochloric acid.
  - 3. Carbon dioxide with water.
- Mention one example for:
  - 1. Endangered bird.
  - 2. Petrified fossils.
  - Bright phenomenon at the Earth poles.
  - 4. Most metallic element in group 1A.

# Question

- Put true or false in front of the following statements:
  - 1. Methyl bromide used in extinguishing fires.
  - 2. Infrared radiation has a chemical effect.
  - Ionosphere is the lowest layer in temperature.
  - 4. Ozone hole increases in January each year.
  - 5. Water density increases by freezing.
  - Mendeleev arranged elements according to their atomic number.
  - 7. Its preferable to store tap water in empty plastic bottles.
- B Locate the position of the following elements in the periodic table:
  - 1. lH,

2. Ne4

3. 20 Ca<sup>40</sup>

 $4._{7}N^{14}$ 

- 5. <sub>3</sub>Li<sup>7</sup>
- Calculate the volume of gas which burns with a pop sound on approaching a glowing splint to it in the cathode of the Hofmann's voltammeter, if the volume of other gas is 6 cm.3

4	Milant:	s meant	h 7
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			~,

Atmospheric pressure.

Chemical Activity Series.

#### Question



### Put ( v ) or (x) with correcting the false ones:

- 1. The first real table for classifying elements is the modern periodic table.
- Each period starts with a strong metal.
- 3. Wind moves from regions of low atmospheric pressure to that of high atmospheric pressure.
- 4. Archaeopteryx is a link between reptiles and birds.
- 5. A hydrogen bond is weaker than a covalent bond.

# B) What happens when ...?

- 1. Storing water in plastic bottles.
- Oxygen atom combines with oxygen molecule.
- 3. An organism is buried fast after death in snow.

#### Choose the odd word out:

- 2. CO<sub>2</sub> MgO Na<sub>2</sub>O CaO. 1. Fluorine - Iodine - Chlorine - Argon.
- 3. Rhinoceros Panda bear Mammoth Bald eagle.

# Question



### Mention an example of each of the following:

- 2. Petrified fossils. A fossil of solid mold.
- A natural protectorate. 4. Greenhouse gases.
- Problem Find temperature at the top of a mountain if it's height is 4 km and the temperature at its foot is 24°C.
- Locate the position of the following elements in the modern periodic table:
  - 1. <sub>11</sub>Na

2. H

3. 10Ne

# **New Valley Governorate**

El-Dakhlah Educational Zone

# Answer the following questions:

# Question



# Complete the following statements:

- 1. Mendeleev arranged the elements ascendingly according to ....., while Moseley arranged them ascendingly according to ......
- 2. Ozone layer is formed in ....... layer, while meteors is formed in ...... layer.

159

هذا العمل خاص بموقع ذاكرولي التعليمي ولا يسمح بتداوله على مواقع أخرى





A	PARI	
	3	
/		/

- There is ...... bond among the atoms that form water molecule, while there is ...... bond among water molecules.
- 4. ..... is from extinct birds, while ..... is from endangered birds.
- 5. Br<sub>2</sub> + 2 KCl ----
- B Mention two conditions of fossils preservation (formation)?
- (c) If the temperature at a mountain foot is 35° C. Calculate the temperature at its top if its height is 3 km.

# Question

the correct answer

- Choose the correct answer:
  - 1. The scientist ...... had discovered the main energy levels
    - a. Moseley
- b. Rutherford
- c. Bohr
- 2. The complete body fossils are found in ......
  - a. silica.
- b. sedimentary rocks. c. snow.
- 3. ..... gas evolved when sodium reacts with water.
  - a. O<sub>2</sub>

b. N<sub>2</sub>

- c. H2
- 4. ..... is from extinct mammals.
  - a. Dodo
- b. Rhinoceros
- c. Quagga
- 5. Increasing the concentration of ...... in water causes the death of brain cells.
  - a. mercury
- b. lead
- c. arsenic
- B Mention one use (importance) for each of the following:
  - 1. Van-Allen belts.
  - 2. Isobar.
  - Altimeter in aeroplanes.
- C Locate the position of the following elements in the modern periodic table :
  - 1. 18 Ar
- 2. 11Na
- What are the results based on ... ?
  - 1. Mixing human and animals wastes with water.
  - 2. Increasing the concentration of greenhouse gases in air.
- What is the difference between mold and cast?

### Question

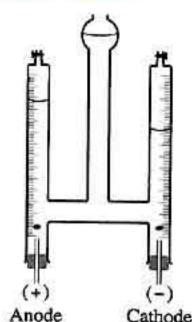


- Write the scientific term:
  - 1. Elements, which have the properties of metals and nonmetals.
  - 2. Remains of old organisms that lived in the past for a short period, then became extinct.
  - 3. A charged layer reflects radio waves.
  - 4. Natural safe areas that are established to protect the endangered species.
  - 5. A descending arrangement of elements according to their chemical activity.

160

هذا العمل خاص بموقع ذاكرولي التعليمي ولا يسمح بتداوله على مواقع أخرى والمعلوم

- B The opposite figure represents Hofmann's voltameter, which is used in the water electrolysis:
  - 1. Write the chemical equation, which expresses the reaction.
  - 2. If the volume of the gas, which burns with a pop sound = 20 cm<sup>3</sup>. What is the volume of the other gas?
  - 3. What is the name of the gas, which collected at each of the following? a. Anode. b. Cathode.



- Exclude the unsuitable word and mention what the rest has in common:
  - 1. Li / Na / Cl / K
  - 2. Cl<sub>2</sub> / O<sub>2</sub> / I<sub>2</sub> / Br<sub>2</sub>
- D Compare in a table between simple ecosystem and complicated ecosystem.

Question

- Give reasons for:
  - 1. Using liquefied nitrogen in the preservation of the eye cornea.
  - 2. Stopping manufacturing of concorde aeroplanes.
  - 3. Water and ammonia are from polar compound.
  - 4. We should not keep the tap water in plastic bottles.
- B Mention the measuring unit of each of the following:
  - 1. The wavelength of the ultraviolet radiation.
  - 2. Atmospheric pressure.
- 3. The degree of ozone.
- Illustrate with formula and equation only, the role of ultraviolet radiation in the formation of ozone gas.
- (A):

(A)	(B)
1. Atomic size	a. decreases by increasing the height (elevation).
<ol><li>Non-metallic property</li></ol>	b. increases as we go done in group 1 A.
3. Atmospheric pressure	c. decreases by decreasing the temperature.
4. Metallic property	d. decreases as we go to right side in period.
<ol><li>Water density</li></ol>	e. decreases as we go done in group 7 A.

المعاصرعلوم لغات (Notebook) / ٢ع / تيرم ١ (٢: ٢١)







# 26 South Sinai Governorate

Tur Sinai Directorate

# Answer the following questions:

Question



# Write the scientific term:

- Continuous decrease in numbers of species members without compensation until all die out.
- 2. The descending arrangement of elements according to their chemical activities.
- 3. The erosion of ozone layer above the south pole.
- 4. The traces and remains of the old living organisms, which are preserved in the sedimentary rocks.
- The ability of the atom in the covalent molecule to attract the chemical bond electrons to it.
- B Locate the position of the following elements in the modern periodic table:

1. <sub>18</sub>Ar

2. 20Ca

# Write one example of the following:

1. Fossil of a complete body.

2. Polar compound.

3. Animal extinct in old time.

4. Mold fossil.

A simple ecosystem.

Question

# Choose the odd word out, then link between the rest words:

- 1. Dodo bird Ibis bird Bald eagle Panda.
- Halons Methyl bromide Chlorofluorocarbon compounds Carbon dioxide.
- 3. <sub>3</sub>Li <sub>11</sub>Na <sub>19</sub>K <sub>12</sub>Mg
- 4. Studing life evolution Petrified forests Petroleum exploration Age determination of rocks.
- $5._{6}\text{C} _{9}\text{F} _{17}\text{Cl} _{35}\text{Br}$

### B Give reasons for:

- 1. The formation of aurora phenomenon.
- 2. The atomic size of the same group increases by increasing their atomic number.
- If the temperature at the base of mountain = 13°C, How much is the temperature at its top if the mountain height is 2 km?

# Question 3

### **A** Correct the underlined:

- 1. The first mammoth fossil was discovered preserved in an amber.
- 2. Sodium is kept under the water surface.
- 3. Group 7 A called alkali metals.
- 4. Wadi El-Raiyan protectorate is the first established protectorate in South Sinai.
- 5. Foraminifera fossil links between reptiles and birds.
- 6. Meteors are formed in troposphere due to friction with air molecules.
- 7. Iodine is from liquid halogens.
- 8. Transition elements are found below the modern periodic table.

### (B) Match to (A) what is suitable from (B):

(A)	(B)	
1. Liquefied nitrogen	a. used in the food preservation.	
2. Cobalt 60	b. used to determine today's weather.	
3. Altimeter	c. used to measure the altitude of planes.	
4. Aneroid d. used determine the age of rocks.		
	e. used in the preservation of the cornea.	

(c) If the volume of gas produced from the electrolysis of water at cathode = 8 cm<sup>3</sup>, Calculate the volume of gas produced at anode and write its name.

# Question 4

# (A) Choose the correct answer:

- 1. The pure water boils at ...... °C.
  - a. 200

- b. 40
- c. 100
- d. 70
- 2. The modern periodic table consists of ...... periods.
  - a. 7

- b. 18
- c. 17
- d. 71
- 3. Each period in the modern periodic table starts with ...... element.
  - a. nonmetalic
- b. noble gas
- c. semi-metallic
- d. metal
- 4. The ...... fossil indicate that the environment where they lived was clear, warm, and shallow seas.
  - a. ferns
- b. nummulites
- c. fish
- d. coral

- 5. Normal atmospheric pressure = ······ millibar.
  - a. 1013.25
- b. 76
- c. 1.013
- d. 760

PART

- 6. The crystals of ice take ...... shape.
  - a. quintet
- b. quadrilateral
- c. octogenarian
- d. hexagonal
- 7. The solution produced from dissolving the non-metal oxides in water turns the violet litmus solution into .....
  - a. red.

- b. blue.
- c. not changed.
- d. green.
- 8. Sodium react with water and ...... gas produced.
  - a. H,

- b. CO,
- c. Na
- d. O
- B Compare between the air movement in troposphere and the lower part of stratosphere.
- What happens when ...?
  - 1. Water polluted with human and animal wastes.
  - Oxygen molecule absorbed ultraviolet rays.
  - 3. Increasing the ratio of carbon dioxide gas in air.
  - Added dilute hydrochloric acid to magnesium ribbon.



هذا العمل خاص بموقع ذاكرولي التعليمي ولا يسمح بتداوله على مواقع أخرى والمعلق

# 1 Cairo Governorate

Heliopolis Educational Zone Saint Clare's College

#### Answer the following questions:

#### Question

1

- - 3. From the examples of complete body fossils are ...... and ......
  - 4. By increasing the atomic number, the value of metallic property ....... in the groups of the periodic table.
  - 5. Elements of group (B) are called ...... elements and they appear from period ......
  - 6. Fluorine and chlorine exist in ...... state, while iodine exists in ...... state.
  - 7. There are ...... bonds between water molecules.
- B Find the temperature at a point of height 2000 metres above sea level if the temperature at sea level is 23°C.
- C Give reasons for:
  - 1. The atomic size decreases in periods by increasing the atomic number.
  - 2. Liquefied nitrogen is used in preservation of cornea of the eye.
  - 3. Don't store tap water in empty plastic bottles of mineral water.
  - 4. Pilots prefer to fly their planes at the lower part of stratosphere layer.

# Ouestion 2

- Write the scientific term :
  - Continuous decrease in the number of living organisms without compensation until all die out.
  - 2. A liquid metal acts as a heat conductor in nuclear reactors for generating electricity.
  - The traces and remains of old living organisms which are preserved in the sedimentary rocks.
  - The ability of the atom in a covalent molecule to attract electrons of the chemical bond towards itself.
  - 5. The kind of bond which binds oxygen atom with hydrogen atom in water molecule.
  - 6. The weight of air column of an atmospheric height on a unit area.
  - 7. A phenomenon that occurs due to the increase in the percentage of CO<sub>2</sub> gas and leads to an increase in the planet Earth's temperature.

163			rinai Examina	ПО	15
M What have 10					
What happens if		72 P			
	esium oxide in water (w				
Property and the Control of the Cont	gas in potassium bromid	le solution.			
3. Drinking water p	olluted with mercury.	¥2			
	of the following eleme	200, 1916년 12 10일 대한민국 1일 시간 1일	periodic table :		
1. 20 Ne	2. 40 Ca	3. 32S	4. <sub>2</sub> He		
Question 3	, E				
Choose the correct	answer:				
1. Meteors are form	ed in				
a. mesosphere.	b. ionosphere.	c. exosphere.	d. stratosphere.		
2. All these are gree	nhouse gases except				
a. CO <sub>2</sub>	b. O <sub>2</sub>	c. N <sub>2</sub> O	d. CH		
3. From the endange	ered species is		*		
a. dinosaur.	b. bald eagle.	c. dodo bird.	d. quagga.		
4. All of the followi	ng metals react with wat	er except			
a. K	b. Cu	c. Na	d. Mg		
5. Ozone degree is r	measured in a unit called				
a. millibar.	b. nanometre.	c. dobson.	d. picometre.		
Correct the underli	ned words :				
	t has the smallest atomic	size		- 2	
The state of the s	on of water causes many		d and henatitis		
COLUMN TO SERVICE STATE OF THE	r is an instrument used t			- 15	
and the same of th	overed the main energy I		ospiicric pressure.		
And the same of th	compound dissolves in v				×
- The state of the					
o. Ampinibian lossi	l is a link between reptil	es and birds.			
Mention one use fo	or each of the following	elements:			
1. Altimeter.	2. Cobalt 60	3. Van-A	Allen belts.	- 10 - 10	
			74		
Question 4		2			
Put (✓) or (🗷) and	correct the wrong ones	5:			
1. Mammoth and dir	nosaur are old extincted	animals.		(	)
2. Halogens are mor	novalent elements.			(	)
3. Solutions of meta	l oxides turn blue litmus	papers into red.	21 =	(	)
	ged the elements in an as		rding to their atomic		-
numbers.		a e a completation of the control of		(	)
		& ±	n n n ng ng sgr ar g		0
31		() / ۲ع / تيرم ۱ (م: ۱۰)	المعاصرعلوم لغات (Notebook	11	3

هذا العمل خاص بموقع ذاكرولي التعليمي ولا يسمح بتداوله على مواقع أخرى والمعلقة

(12Mg / 17Cl)

a. Locate them in the periodic table and mention their block.

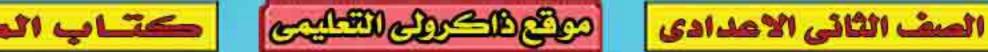
b. Which one has the smallest size? Why?

# Question

# Write the scientific term:

- 1. Descending arrangement of metals according to their chemical activity.
- 2. Traces and remains of old living organisms preserved in sedimentary rocks.
- Coloured bright curtains seen at the two poles.
- 4. Weight of air column of an atmospheric height on a unit area (1m<sup>2</sup>).
- 5. A layer which plays an important role in wireless communications.





كتباب المعاصر

موقع والكروان التعليمي

الصف الثائي الاعدادي

The figure shows a section of the modern period	dic table :	:
---	-------------	---

- 1. What is the atomic number of the element (Z).
- 2. What is the atomic number of the element (X).
- 3. Element (11L) is located in period ...... and group ......

X	: 0
пL	Z
М	
0	

### Question



#### A Choose the correct answer:

- 1. Eating fish, which contain high concentration of ....... causes the death of brain cells.
  - a. mercury
- b. arsenic
- c. lead
- d. iron
- 2. The electronic configuration of calcium ion (Ca<sup>++</sup>) is similar to .........
  - a. 18Ar

- b. 7N
- c. 10 Ne
- d.<sub>2</sub>He
- 3. When mud fills up the shell cavities and solidify, then shell decomposes, ...... is produced.
  - a. a petrified wood
- b. a solid mold
- c. a cast
- d. no correct answer
- 4. The atmospheric envelope is inserted in the outer space in a region known as .........
  - a. exosphere.
- b. ionosphere.
- c. stratopause.
- d. mesopause.
- Ionosphere layer is surrounded by two ...... belts.
  - a. ionic

- b. electric
- c. heat
- d. magnetic

#### B What happens when ... ?

- 1. Storing water in plastic bottles of mineral water.
- 2. Meteors move at a very high velocity in mesosphere layer.
- 3. An atom of a nonmetallic element gains one electron or more during the chemical reaction.
- 4. The melting rate of polar ice increased.
- 5. Silica matter replaces wood material part by part of an old tree.
- Compare between: Basic oxides and acidic oxides.
- Choose from column (B) what suits it in column (A):

(A)	(B)
1. Liquid sodium	a. is used in preservation of food.
2. Liquefied nitrogen	b. is used in manufacture of electronic devices.
3. Cobalt 60	c. is used in nuclear reactors.
4. Silicon slides	d. is used in preservation of cornea of the eye.

### Question

3

# 

1. 2NaBr + Cl<sub>2</sub> ------+ --------

2. Mg + 2HCl \_\_\_\_\_ + ..... + .....

3. ..... + ..... 2KBr

- B Give reason for each of the following:
  - 1. Dodo bird was an easy target for hunters.
  - 2. Pilots prefer to fly their planes in stratosphere.
  - 3. Although water of oceans freezes at polar zones, the aquatic creatures are still alive.
  - 4. Mammoth fossil is preserved as a complete body fossil.
- Calculate the temperature at the base of a mountain, if its height is 6 km and the temperature at its top is 10°C.
- Choose the odd word out, then write the scientific term of others:
  - 1. Sodium / Silver / Potassium / Calcium.
  - 2. N<sub>2</sub> / N<sub>2</sub>O / CO<sub>2</sub> / CH<sub>4</sub>
  - 3. Panda bear / Bald eagle / Dinosaur / Barbary sheep.
  - 4. Hofmann's voltameter / Altimeter / Barometer / Aneroid.
  - 5. Trilobite fossil / Ammonites fossil / Nummulites fossil / Ferns fossil

#### Question

4

- A Correct the underlined words:
  - 1. Petrified wood is considered as rocks.
  - 2. Each period in the periodic table starts with inert gas.
  - 3. An element which is located in the 3rd period and group (2A), its atomic number is 8
  - 4. Mixing animals and human wastes with water causes chemical pollution.
- B Write the scientific term:
  - 1. Safe places that are specified to protect the endangered species in their homeland.
  - A phenomenon that appears as brightly coloured light curtains seen at both poles of the Earth.
  - 3. The continuous increase in the average temperature of the air near the surface of the Earth.
  - 4. The ability of the atom in a covalent molecule to attract the electrons of the chemical bond towards itself.
  - 5. The solidified resinous matter, which was secreted by pine trees during old geologic ages.
  - The block that contains the series of lanthanides and actinides.
- Mention one importance for :
  - 1. Altimeter.

- 2. Methyl bromide gas.
- D What do the following numbers indicate ... ?
  - 1.300 dobson.

2. 104.5°

# 4

# Cairo Governorate

El-Waily Educational Zone St. Joseph Maronite Language Schools

#### Answer the following questions:

#### Question



- Write the scientific term:
  - 1. An atmospheric layer at which the air moves vertically.
  - 2. The ability of the atom in the covalent molecule to attract the chemical bond electron to it.
  - 3. A phenomenon looks like colourful light curtains seen in the two poles.
  - The traces and remains of old living organisms which are preserved in sedimentary rocks.
- B Write one use for each of the following:
  - 1. Liquefied nitrogen.

- 2. Sodium in liquid state.
- C Locate the position of the following elements in the modern periodic table :
  - 1. 19K

2. 10Ne

#### Question



- - 1. The atmospheric pressure at sea level equals ...... mb.
  - 2. The ultraviolet rays are three kinds which are ...... , ....... and .......
  - 3. Sodium is kept under the surface of ...... so, as not to react with .......
- B Write one difference between:
  - 1. Metals and nonmetals.
  - Mesosphere layer and thermosphere layer.
  - 3. Coral fossils and ferns fossils.
- Write the equation of electrolysis of water.

### Question

3

- Give reasons for :
  - 1. Cesium is considered from the strongest metallic element.
  - 2. The ozone layer acts as a protective shield for living organisms.
  - 3. Amber is considered as suitable medium to form a complete body fossil.
- B What happens when ... ?
  - 1. Putting a magnesium strip in a test tube containing oxygen.
  - 2. Decrease in water temperature less than 4°C.

0	What	hap	pens	when	 ?
•					 -

- 1. Dissolving magnesium oxide in water then adding drops of litmus solution to it.
- 2. Dipping the old insects in amber.
- 3. Infrared radiations don't reemit back from troposphere layer.
- There is no difference in electronegativity between hydrogen atom and oxygen atom in water molecule.

# Question 2

### Mrite the scientific term of each of the following:

- 1. The strongest metal in group (1A).
- 2. They are symbolized by the letters s, p, d and f
- 3. A type of ultraviolet radiation that is absorbed completely (100 %) by the ozone layer.
- Fossils of living organisms lived for a short time in the past in a wide geographical range then became extinct.
- 5. A unit that measures the degree of ozone.
- 6. It is a path of energy that transfers from a living organism to another.
- 7. The elements that occupy the middle block (d) in the periodic table.
- 8. The halogen that exists in a liquid state.

### **B** Mention one example for :

1. Extinct bird in recent time.

2. Greenhouse gases.

### Mention one importance for :

1. Liquefied nitrogen.

2. Van-Allen belts.

Calculate the height of a mountain if the temperature at the foot of the mountain is 30°C and at the top of this mountain is 10.5°C.

# Question 3

# Choose the correct answer :

1. The scientist ...... had discovered the main energy levels.

a. Moseley

b. Hofmann

c. Bohr

d. Mendeleev

2. The ..... replaces the wood material, part by part of an old tree.

a. plastic

b. iron

c. silica

d. copper

3. ..... is an example of microfossils.

a. Mammoth

b. Fern

c. Foraminifera

d. Coral

4. Mammoth fossil is an example of a ...... fossil.

a. cast

b. mold

c. complete body

d. petrified

5. All of the following elements are metalloids except .........

a. tellurium.

b. silicon.

c. boron.

d. bromine.

المعاصرعلوم لغات (Notebook) / ۲ع / تيرم ۱ (م: ١٦)







6. The air in troposphere	layer moves
---------------------------	-------------

- a. horizontally.
- b. vertically.
- c. inclined.
- d. no right answer.
- 7. Which of the following elements is located in the third period?......
  - a. 19K

- b. 6C
- c. Li
- d. 15P
- 8. Alkali metals have the following properties except they .......
  - a. have low density.

b. conduct electricity.

c. don't react with water.

d. conduct heat.

# On electrolysis of acidified water by Hofmann's voltameter:

- 1. What is the name of the gas that evolves at the anode?
- Calculate the volume of the gas formed at the cathode, if the volume of the gas that evolves at the anode is 15 cm<sup>3</sup>.

### What is meant by ... ?

1. Extinction.

2. Aurora phenomenon.

3. Ozone hole.

4. Simple ecosystem.

#### Question

# Correct the underlined words:

- 1. Nummulites fossils are used to determine the age of the sedimentary rocks.
- 2. Eating food containing high percentage of lead causes blindness.
- 3. Moseley put lanthanides and actinides elements on the left side of the periodic table.
- 4. The number of electrons in positive ion is equal to that of its atom.
- 5. Storing the tap water in plastic bottles cause the increase of infection of hepatitis.

# B Give reasons for :

- 1. Most of weather conditions take place in the troposphere layer.
- Atomic size of sodium (11Na) is greater than that of magnesium (12Mg).
- Adding drops of dilute acid to water during its electrolysis.
- Pure water doesn't affect blue and red litmus papers.
- Compare between: Cast and mold.

# Write the balanced chemical equation of the following reactions:

- 1. Burning a piece of coal in air.
- 2. Sodium bromide with chlorine.
- 3. Potassium with bromine.

# Cairo Governorate

Basateen & Dar El-Salam Educational Administration

Answer the following questions:

Question

- Choose the correct answer :
  - 1. Bilharzia is due to the ...... pollution of water.
    - a. biological

b. thermal

c. chemical

- 2. The atomic radius is measured in .........
  - a. nanometre.

- b. picometre.
- c. kilometre.
- 3. A fossil that plays an important role in petroleum exploration is .........
  - a. morgan.

- b. nummulites.
- c. foraminifera.
- 4. The difference in electronegativity between the two elements of a polar compound is ..........
  - a. zero.

- b. relatively high.
- c. small.

- Ice crystals have ..... shape.
  - a. tetragonal

- b. pentagonal
- c. hexagonal
- B If the temperature at the base of a mountain is 20.6°C, calculate the temperature at its top if the mountain's height is 8862 m.
- Use the figures below to write the correct letter in the space provided:



(a) Archaeopteryx



(b) Insect in amber



(c) Petrified wood



(d) Foraminifera



(e) Ammonites

Main characteristics of fossils	Letter
1. An example of complete body preserved from decaying and form fossil.	
2. A rock mold carrying the internal details of the snail.	
<ol> <li>Minerals replace the organic matter of organism, part by part, without changing its shape.</li> </ol>	
4. Used to study life evolution as it represents the link between reptiles and birds.	
<ol> <li>A good indication of the age of rocks and suitable conditions of petroleum formation.</li> </ol>	

123





الصف الثائي الاعدادي

# 3)

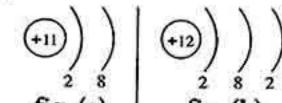
# Question 2

# Mrite the scientific term of each of the following:

- 1. A table in which the elements are arranged according to their atomic weights.
- 2. An area where the atmospheric envelope is inserted in outer space.
- Elements where their valency shell contains more than four electrons.
- 4. A molecule produced from the union of an oxygen atom and its molecule.
- 5. A safe place used to protect endangered species from extinction.
- 6. They indicate the age of sedimentary rocks in which they are found.

# B Study the opposite figures and answer the following questions:

- 1. Which figure represents a positive ion?
- 2. Which figure represents a neutral atom?
- 3. Determine the position of the atom in the periodic table.



### What is the difference between ?

- Simple and complex ecosystems.
- The importance of nummulites and ferns fossils.

# Question

### A Correct the underlined words:

- 1. Dissolving basic oxides in water produces acids.
- 2. Zero group contains active gases.
- 3. The layer that represents (75%) of the atmospheric air mass is mesosphere.
- 4. Atmospheric pressure is measured by a unit called dobson.
- 5. Radio waves are reflected and transmitted by communication centres in stratosphere.
- 6. From the most important greenhouse gases is ammonia.

### B Give reasons for :

- 1. Water has high boiling point.
- Bromine cannot replace chlorine in sodium chloride.
- Ozone layer acts as a protective shield for living organisms.
- Global warming phenomenon has negative effects on Earth.

# Question 4

# The opposite figure shows the reaction of sodium and water:

- 1. Write the balanced chemical equation of the reaction.
- 2. Name the gas produced and how you can test about it.



124

هذا العمل خاص بموقع ذاكرولى التعليمي ولا يسمح بتداوله على مواقع أخرى والمعلوم





الصف الثائي الاعدادي

- Mention the importance of:
  - 1. Liquid sodium.

2. Ras Mohamed protectorate.

3. Altimeter.

- 4. Coral fossils.
- Write a balanced symbolic chemical equation for the following reactions:
  - 1. Carbon dioxide with water.
- 2. Potassium iodide with bromine.
- 3. Magnesium with dilute hydrochloric acid.

# 7 Giza Governorate

Boulak El-Dakrour Directorate Dar El-Hanan Language School

#### Answer the following questions:

#### Question

- Complete the following statements:
  - 1. Moseley put ...... and ..... series below the periodic table.
  - 2. Each period in the modern periodic table starts with ....... and ends with ......
  - 3. The valency of alkali metal elements is .......
  - 4. ..... and ..... are endangered mammals.
  - 5. Fossils are used in ..... exploration and determination the age of ......
  - 6. Fossils always exist in the ......
- (B) Mention the use of:
  - 1. Liquid sodium.

2. Cobalt 60.

# Question 2

- Write the scientific term :
  - 1. A bond that exists between water molecules.
  - 2. Indicated by the letters K, L, M, N, O.
  - 3. A device used to measure the elevations above sea level.
  - 4. Two magnetic belts help in scattering the harmful cosmic radiations away from the Earth.
  - 5. Safe areas established to protect the endangered species in their homeland.

# B Give reasons for :

- 1. Elements of the same group have the same properties.
- 2. Liquefied nitrogen is used in preservation of cornea of eye.
- 3. The lower part of stratosphere is suitable for flying planes.
- 4. The simple ecosystem is significantly affected by the absence of one of its species.

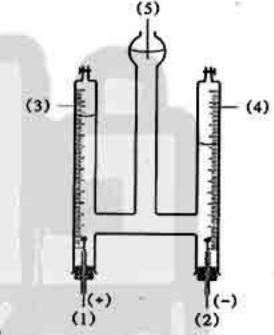


# Question

- Correct the underlined words:
  - 1. The elements with the same physical and chemical properties have been put in horizontal periods.
  - 2. All weather phenomena like rains, wind and clouds occur in the ionosphere.
  - 3. Millibar is the unit of measuring the ozone degree.
  - 4. Archaeopteryx fossil is a kind of extinct elephants.
  - 5. Ammonites fossils indicate that the environment where they lived was warm clear shallow seas.
- B Calculate the height of a mountain if the temperature at its base is 30°C and at its top is (-9°C).

# Question

- A From the opposite figure:
  - 1. What is the name of this apparatus?
  - 2. Label the figure.



- B Locate the position of the following atoms in the periodic table:
  - 1. 10Ne
- 2. 20Ca
- 3. <sub>17</sub>Cl
- 4. H

# Giza Governorate

Omranya Educational Directorate Al-Farouk Language School

# Answer the following questions:

# Question

- A Write the scientific term :
  - 1. The number of positive protons inside the nucleus.
  - 2. The product of dissolving nonmetallic oxides in water.
  - 3. The alkali elements.
  - 4. A good polar solvent for most of ionic compounds and some of covalent compounds.
  - 5. Brightly coloured light curtains at both north and south poles of the Earth.

126

هذا العمل خاص بموقع ذاكرولي التعليمي ولا يسمح بتداوله على مواقع أخرى

### Study the opposite figures, then answer:

- 1. Which one represents: (Positive ion neutral atom).
- 2. Locate the position of the element in the periodic table (period - group).

@)-)	(+12)
2 8	2 8 2
Ga (a)	Ga (b)

- 1. If the temperature at the bottom of Everest mountain is 20.6°C. Find the temperature at its top if the height of the mountain is 8862 m.
  - 2. Mention an example for each of the following:
    - Fossil of a complete body.
    - (2) Endangered plant.
    - (3) An extinct bird recently.

# Question



#### Give reasons for:

- 1. Elements of the same group in the modern periodic table have similar properties.
- 2. Potassium reacts with water instantly and faster than sodium.
- Rising of boiling point and freezing point of water.
- 4. The lower part of stratosphere is suitable for flying planes.
- Desert ecosystem is considered as a simple ecosystem.
- 1. A metallic element (X) lies in the third period and group (1A) in the modern periodic table:
  - (1) Draw the electronic distribution of this element.
  - (2) Mention the atomic number of this element.
  - (3) What is the block that this element belongs to?
  - (4) What is the valency of this element?
  - 2. Mention one importance for each of the following:
    - (1) Slides of silicon.

(2) Van-Allen belts.

# 1. What happens when ... ?

- (1) The reaction of chlorine with the solution of potassium bromide.
- (2) Dissolving magnesium oxide in water.

#### 2. Mention one difference between:

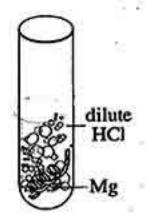
- (1) Fluorine molecule and helium molecule.
- (2) The period number of an element and the group number of an element.
- (3) Metals and nonmetals.





هذا العمل خاص بموقع ذاكرولى التعليمي ولا يسمح بتداوله على مواقع أخرى

- 1. Compare between acidic oxides and basic oxides according to: (product that dissolves in water - affect on litmus paper - giving example).
  - 2. Study the opposite figure, then answer the questions:
    - (1) Write the balanced equation.
    - (2) What happens when approaching a lighted match to the opening of the tube.



# Giza Governorate

6th October Educational Directorate Om El-Moumeneen Language Schools

Answer the following questions:

#### Question

- Write the scientific term:
  - Safe areas established to protect the endangered animals.
  - 2. The replica of the internal details of the living organism.
  - 3. Weak electrostatic attraction that arises between the molecules of the polar compounds.
  - 4. It is a phenomenon that appears as brightly coloured curtains seen at the two poles.
  - 5. It is the process of replacing the wood material by silica to form petrified wood.
  - 6. Decrease in the thickness of ozone layer.
  - 7. The descending arrangement of elements according to their chemical activity.
- B Calculate the height of a mountain if the temperature at its base is 30°C and at its top is (-9°C).
- Cocate the position of the following elements in the modern periodic table :
  - 1. 17Cl

- 2. 10 Ne
- 3. 3Li

# Question

- A Give reasons for :
  - 1. Cesium is the most active metal in group (1A).
  - 2. Sugar dissolves in water.
  - Ozone layer exists in stratosphere layer.
  - 4. The extinction of some animals in recent ages.
- Mention three ways to protect water from pollution.
- Mention the importance of :
  - 1. Aneroid.

- 2. Liquefied nitrogen.
- 3. Van-Allen belts.

المعاصرعلوم لغات (Notebook) / ۲ع/تيرم ١ (٢: ١٧)

هذا العمل خاص بموقع ذاكرولى التعليمي ولا يسمح بتداوله على مواقع أخرى





0	Give	an	examp	le	for	:
			THE COMPANY OF THE PARTY OF THE			

Endangered plant.

- 2. Amphoteric oxide.
- 3. Liquid element from halogens.
- 4. Cast fossil.

#### Question

### ⚠ Complete the following statements:

- 1. "d" block elements are called the ...... elements.
- and ...... are from greenhouse gases.
- There is a ...... bond between hydrogen and oxygen in water molecule.
- 4. Cobalt 60 has the ability to kill ......
- 5. The existence of the coral fossils in a certain area indicate that the environment was .........
- 6. ..... and ..... are from ozone layer pollutants.
- 7. The strongest nonmetal lies in group .........
- 8. When the atomic number increases in the same period, the metallic property .......

#### B Compare between:

- Simple ecosystem and complicated ecosystem.
- Basic oxides and acidic oxides.

### Question

#### Choose the correct answer:

- The degree of ozone under STP condition is...... Dobson.
  - a. 100

b. 200

- c. 300
- The first protectorate in Egypt is ...... protectorate.
  - a. Ras Mohamed
- b. Wadi El-Raiyan
- c. Panda
- 3. From the complete body fossils is ........
  - a. mammoth.
- b. nummulites.
- c. fish.
- 4. The number of elements in the Earth's crust equals .........
  - a. 118

- c. 120
- 5. The atmospheric pressure at the top of a mountain equals ...... bar.
  - a. 1

b. 0.05

- c. 1.88
- is an example of microfossils.
  - a. Ferns

- b. Foraminifera
- c. Archaeopteryx

# B Mention the role of the following scientists:

1. Moseley.

2. Bohr.

### Complete the equations:

# Giza Governorate

Abu El-Nomrous Directorate

		Tuture Generation	_anguage concer	_
nswer the following ques	tions :	¥		
Question 1				
Choose the correct ans	wer:			
1 is/are used in e				
a. Methyl bromide	b. Halons	c. Nitrogen oxides	d. UV radiation	
2. The second layer of a	mosphere is called			
a. mesosphere.	b. troposphere.	c. stratosphere.	d. thermosphere.	
3. The transition elemen	ts start to appear fro	om the beginning of th	ne period.	
a. second	b. third	c. fourth	d. fifth	
4. All of the following as	re from endangered	species except		
<ul> <li>a. papyrus plant.</li> </ul>	b. bald eagle.	c. quagga.	d. rhinoceros.	
5. p-block contains	groups.			
a. 10	b. 2	c. 6	d. 8	
6. All of the following as	re greenhouse gases			
a. CO <sub>2</sub>	b. O <sub>2</sub>	c. N <sub>2</sub> O	d. CH <sub>4</sub>	
7. Group (B) contains	elements.		a Lange	
a. halogens	b. nonmetals	c. transition	d. metalloids	
8. The inert gas that has		A STATE OF THE PARTY OF THE PAR		
a. <sub>10</sub> Ne	b. <sub>2</sub> He	c. <sub>18</sub> Ar	d. <sub>17</sub> Cl	
Give reasons for :			/	
1. The lower part of strat	osphere is suitable	for flying planes.		
2. It is difficult to identif	y semi-metals base	d on the electronic con	nfiguration.	
V 16 AL . A				
If the temperature at the			ure at the top of	
a mountain of height 3	oou m above the E	arth's surrace.	57	
Question 2				
	15394			
Put (√) or (★) and corr		S:		,
1. All periods start with				(
2. Hofmann's voltameter	Chapter (Cestificated) Sensitives (MIII - Sessitive Sensitive	NAME OF THE A STOCK OF THE PARTY OF THE PART	<b>₽</b> 33822-33325	(
3. Mesosphere is the layer	The second secon	40. 10 NO 10 NO 10 NO 10 TO 10	teors.	(
4. Ozone layer totally ab	A STATE OF THE PARTY OF THE PAR	maviolet radiations.		(
5. Tellurium is a metallo		oiae		
<ol><li>Complicated ecosystem</li></ol>	ning to the state of the state	onsidered as fossils		1

8. Altimeter is a kind of barometers.

- B What do the following numbers indicate ...?
  - 1.118

- 2.104.5°
- 3.100°C
- 4. 1013.25 mb

Compare in a table between groups (1A) and (7A).

#### Question

3

- - 1. The safe areas established to protect endangered species are called .........
  - 2. ..... causes liver cancer.
  - 3. MgO + H<sub>2</sub>O -----
  - 4. ..... is responsible for the high boiling point of water.
  - 5. The satellites rotate around the Earth in ...... layer.
  - The scientist ...... discovered the main energy levels.
  - 7. Mammoth fossil is preserved in ......
  - 8. Water has ...... effect on litmus paper.
- B What happens when ...?
  - 1. Storing water in plastic bottles of mineral water.
  - 2. Increasing the numbers of cars in streets.
  - 3. Element loses an electron.
  - Ozone layer disappeared.
- Arrange the following elements in an ascending order according to the metallic property and give a reason:

Sodium (11Na) - Magnesium (12Mg) - Potassium (19K) - Cesium (55Cs)

# **Ouestion**

4

- Write the scientific term :
  - 1. The measuring unit of the atomic size of an element.
  - 2. The region between troposphere and stratosphere.
  - 3. The number of protons inside the nucleus of the atom of an element.
  - 4. The halogen which exists in a solid state.
  - 5. Remains of old living organisms that are preserved in sedimentary rocks.
  - 6. The permanent change of water by adding any substance.
  - The descending arrangement of elements according to their chemical activity.
  - 8. They are safe areas established to protect endangered species in their homeland.

- B Locate the position of the following elements in the periodic table (show their configuration):
  - 1. Calcium (20Ca).

2. Silicon (14Si).

- What is meant by ... ?
  - 1. Ozone layer.

2. Electronegativity.

# Alexandria Governorate

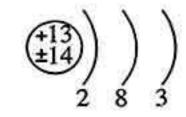
Middle Educational Zone New S.L.S. "Girls"

Answer the following questions:

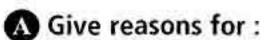
Question



- Write the scientific term of each of the following:
  - 1. The scientist who discovered that the atom contains positive protons in the nucleus.
  - Elements which have properties of metals and nonmetals.
  - 3. Adding any substance to the water which changes its properties, affects the health and life of living organisms.
  - 4. The weight of air column on a unit area (1m2).
  - 5. Two magnetic belts surrounding ionosphere and play an important role in scattering harmful charged cosmic radiations.
  - 6. The continuous increase in the average temperature of the Earth's near surface air due to the greenhouse effect.
  - 7. Traces and remains of old living organisms that are preserved in sedimentary rocks.
  - 8. The continuous decrease without compensation in the number of a certain species until all the members of species die out.
  - The apparatus which is used for water electrolysis.
  - 10. A mammal between horse and zebra that extinct recently due to overhunting.
  - 11. The ability of the atom to attract the electrons of the covalent bond towards itself.
- B Look at the opposite figure, then find the location of this element in the modern periodic table. Mention the block of this element.

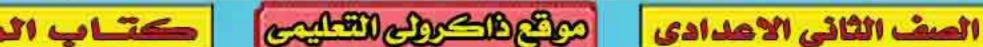


#### Question



- 1. Atomic size decreases in the period from left to right.
- 2. Reaction of potassium with water is stronger than that of sodium with water.
- 3. Pilots prefer to fly their planes in stratosphere layer.
- Silicon slides are used in making electronics as computers.





# B Choose from column (B) what suits it in column (A):

(A)	<b>(B)</b>
1. 2Na + 2H <sub>2</sub> O	a. unit of measuring the thickness of ozone layer.
2. Br <sub>2</sub> + 2KI	b. is from endangered species.
~	c. 2NaOH + H <sub>2</sub>
<ol><li>Coral fossils</li></ol>	d. extinct because it has small wings so, it was easy to get
4. Dobson	hunted.
5. Dodo bird	e. 2KBr + I <sub>2</sub>
6. Papyrus plant	f. showed that the environment where they lived was clear, warm and shallow seas.

# Correct the underlined words in each of the following statements:

- 1. Pure water has acidic effect on litmus paper.
- 2. Ultraviolet radiation has thermal effect on the Earth.
- 3. Increasing the concentration of mercury in water causes liver cancer.
- 4. Snow is a solidified resinous matter secreted by pine trees.

# Question 3

- Find the temperature at a point of height 10 km above sea level, if the temperature at sea level is 24°C.
- B Complete each of the following statements:
  - is from the examples of polar compounds because the difference in electronegativity between its elements is relatively .......
  - 2. ......... classified the elements in his table according to their properties and atomic mass.
  - 3. ..... is a type of barometers used to determine the possible day weather.
  - 4. ..... is from the factors that cause extinction of species.
  - 5. Microfossils (foraminifera and radiolaria) help in ...... exploration.
  - 6. Mg + 2HCl \_\_\_\_\_ + ..... + .....
  - 7. ..... and ..... are from greenhouse gases.
  - 8. ..... fossils indicate the age of sedimentary rocks.

#### Question

4

### 

- 1. ..... protectorate is a natural protectorate in USA where grey bear is protected.
  - a. Ras Mohamed
- b. Wadi El-Raiyan
- c. Bluestone
- d. Panda
- Ozone layer prevents (100 %) of ...... ultraviolet rays from passing to the Earth.
  - a. near

- b. medium
- c. far
- d. (a) and (b) together

134

هذا العمل خاص بموقع ذاكرولي التعليمي ولا يسمح بتداوله على مواقع أخرى والمعلقة

#### Final Examinations 1

-3. The modern period	lic table contains	elements.	
a. 26	b. 92	c. 100	d. 118
4. Which of the follow	wing is an acidic oxide	e ?	
a. CO <sub>2</sub>	b. MgO	c. Na <sub>2</sub> O	d. FeO
5. Which of the follow	ving is a radioactive ele	ement which is used	in food preservation?
a. Liquid sodium.		b. Liquefied nitr	rogen.
c. Cobalt 60.	:5	d. Water.	
6. Which of the follow	wing is correct about a	ılkali metals? They	
a. have high densit	у.	b. are monovale	nt.
c. are bad conducto	ors of electricity.	d. form negative	ions.
7. Water has high boi	ling point due to the p	resence of bo	onds between its molecules.
a. hydrogen	b. ionic	c. covalent	d. metallic
8 added group	zero in his table for n	oble gases.	
a. Mendeleev	b. Moseley	c. Rutherford	d. Einstein
9. Which of the follow	wing is the halogen tha	at exists in a solid s	tate ?
a. Fluorine.	b. Chlorine.	c. Bromine.	d. lodine.
10. When putting a gla	ss bottle completely f	illed with water in t	he freezer, it breaks because
when water freezes	its increases.		
a. temperature	b. density	c. volume	d. acidity
11. Which of the follow	wing elements don't re	eact with water?	
a. K and Na	b. Ca and Mg	c. Zn and Fe	d. Cu and Ag
12. What is the volume	e of hydrogen gas evol	lved from electrolys	sis of acidified water if you
know that the volu	me of oxygen gas evol	lved is 2 cm <sup>3</sup> ?	
a. 1 cm <sup>3</sup>	b. 2 cm <sup>3</sup>	c. 4 cm <sup>3</sup> .	d. 6 cm <sup>3</sup> .
Mention the type of	the fossils shown in	the following figur	es:

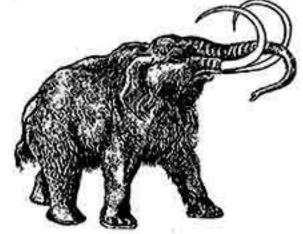


fig. (1)

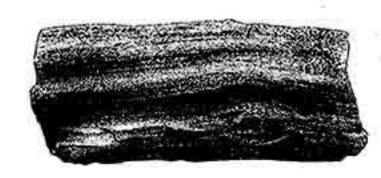


fig. (2)

Final Examinations

Calculate the temperature at the top of a mountain if you know that the temperature at its foot is 26°C and its height is 4 km.

# Question 3

- Write the scientific term:
  - The continuous decrease in the number of a certain species of living organisms without compensation until the last member of the species dies out.
  - 2. Shells in the atom structure indicated by the letters K, L, M, N, O
  - 3. Appearance of bright coloured light curtains at the two poles.
  - 4. The weight of air column of an atmospheric height on a unit area.
  - 5. A charged layer which reflects radio waves.
  - 6. The continuous increase in the average temperature of the Earth.
- B Locate the following element in their position in the modern periodic table :

1. 20Ca

2. <sub>17</sub>Cl

3. 3Li

4. 7N

#### Question

4

- A Give reasons for the following:
  - 1. Water molecule is a polar compound.
  - 2. The lower part of stratosphere is suitable for flying planes.
  - 3. Tropical forest is a complicated ecosystem.
- B Correct the underlined words:
  - 1. Sodium is used in making electronic slides.
  - 2. Cobalt 60 is used in preservation of cornea of eye.
  - 3. When water freezes, its density increases.
  - 4. The ozone hole appears above the middle east.

# 13 Alexandria Governorate

Al-Gomrok Educational Zone

Answer the following questions:

### Question

- A Choose the correct answer:
  - 1. The temperature at the top of mesosphere layer reaches ........

a. - 60°C

b. - 90°C

c.0°C

d. 120°C

2. The strongest metal locates in group .......

a. 2A

b. 1A

c. 7A

d. zero

المعاصرعلوم لغات (Notebook) / ۲ع/تيرم ۱ (م: ۱۸)





3	is an	examp	e.of.e	xtinct s	pecies.
---	-------	-------	--------	----------	---------

- a. Panda bear
- b. Bald eagle
- c. Quagga
- d. Papyrus plant
- 4. If the atomic number of an element is 15, so the electronic configuration of its ion is .......
  - a. (2,8,8).
- b. (2,8).
- c. (5,8,5).
- d. (2,5,8).
- 5. The gas produced from the reaction between sodium bicarbonate and vinegar is ........
  - a. CH,

- b. N,O
- c. H,
- d. CO,

### B What happens in the following cases ...?

- 1. Decrease in water temperature less than 4°C.
- Storing tap water in plastic bottles of mineral water.

### Cocate the position of these elements in the modern periodic table :

- 1. 2He
- 2. <sub>19</sub>K
- 3. <sub>7</sub>N

#### **Question**

#### Write the scientific term:

- 1. The continuous decrease in the number of species without compensation until all die out.
- 2. The hottest layer in the atmosphere.
- The elements which have the properties of both metals and nonmetals.
- They are safe areas established to protect the endangered species in their homeland.
- 5. The radioactive element that is used in food preservation.

### B Compare between:

Mendeleev's periodic table and modern periodic table.

# Mention one use or importance for the following:

- Hofmann's voltameter.
- 2. Liquefied nitrogen.
- Van-Allen belts.

### Question

#### Complete the following statements:

- 1. The fossils are found in ..... rocks.
- 2. Increasing the concentration of ...... in water causes the death of brain cells.
- 3. Br<sub>2</sub> + 2KI \_\_\_\_ + ..... + .....
- 4. The snow crystal has ...... shape.
- If a mountain, its height is 6000 m and the temperature at its base is 30°C. Calculate the temperature at its top.

### Mention one example for :

- 1. An element doesn't react with water.
- 2. A type of microfossils which is considered a guide for existence of petroleum.
- An endangered bird.

#### Question

4

#### A Correct the underlined words:

- 1. Methyl bromide used in extinguishing fires.
- 2. The unit of measuring the degree of ozone layer is bar.
- 3. Ca and Na react slowly with water.
- Lithium is the strongest metallic element in group (1A).
- 5. O<sub>2</sub> is from greenhouse gases.

#### B Give reasons for the following:

- 1. Freon gas has bad effects on the environment.
- 2. By increasing the atomic number among groups, the atomic size increases.
- 3. Amber is considered a suitable medium for formation of complete body fossils.

### Write the balanced chemical equations representing each of the following:

- 1. Magnesium with hydrochloric acid.
- 2. Reaction of sodium with water.

# 14. El-Qalyoubia Governorate

Banha Educational Zone

#### Answer the following questions:

### Question

1

### ♠ Choose the correct answer :

- 1. All of the following elements are from semi-metals except .........
  - a. tellurium.
- b. silicon.
- c. boron.
- d. bromine.

- 2. The strongest metal locates in group .......
  - a. 2A

- b. 1A
- c. 1B

- d. 7A
- Ozone layer doesn't allow the passage of ...... ultraviolet rays.
  - a. near

b. medium

c. far

- d. all the previous answers
- 4. There are ..... bonds between water molecules.
  - a. hydrogen

b. covalent

c. ionic

d. all the previous answers

139

مذا العمل خاص بموقع ذاكرولى التعليمي ولا يسمح بتداوله على مواقع أخرى والمعلومة





Mention one importance or use	for:	
-------------------------------	------	--

1. Altimeter.

2. Foraminifera microfossil.

3. Silicon.

4. Mesosphere.

### Complete the following equations:

#### Question

#### Correct the underlined words:

- 1. Elements in group (1A) are known as halogens.
- 2. Mammoth is one of the examples of petrified fossils.
- 3. Ozone degree is measured in picometre unit.
- Each period ends with a nonmetal.

#### B What happens when ...?

- 1. Putting lithium in kerosene.
- Drinking water polluted with mercury.
- 3. Increasing the use of CFC<sub>s</sub> on Earth.
- 4. Mixing of animal and human wastes in water.

### Compare between (related to definition and examples):

- Simple ecosystem and complicated ecosystem.
- 2. Cast and mold.

# El-Sharkia Governorate

West Zagazig Admin.

#### Answer the following questions:

#### Question

### Choose the correct answer :

- 1. Elements of the modern periodic table are classified into ...... block(s).
  - a. one
- b. two
- c. three

d. four

- 2. ..... is an atom of a non-metallic element which gains an electron or more during the chemical reaction.
  - a. Positive ion

b. Negative ion

c. Excited atom

d. No correct answer

# Question 4

- Write the scientific term:
  - 1. The solidified resinous matter which was secreted by pine trees during old geologic ages.
  - 2. The bond between water molecules.
  - 3. A gas which is important for building ozone gas.
  - 4. A phenomenon that appears as brightly coloured light curtains seen at the both poles of the Earth.
- B Compare between:
  - 1. Trace and remains.

- Troposphere and stratosphere.
- Write the chemical equation which represents the following reactions:
  - 1. Magnesium with dilute hydrochloric acid.
  - 2. Carbon dioxide with water.

# 16 El-Menofia Governorate

Shebin El-Kom Directorate

#### Answer the following questions:

#### Question

1

- **A** Complete the following sentences:
  - 1. In the periodic table, the elements which are identical in properties lie in the same ..........
  - Mendeleev had to deal with the ...... of one element as different elements, because they are different in their ........
  - 3. d-block contains ..... elements.
  - 4. 2Na +2H<sub>2</sub>O ------+ + .....
  - 5. Among the most famous types of barometers are ......... and .........
  - 6. Types of fossils differ according to their way of ..........
  - 7. The snow crystal's shape is ........ and its density is ...... than water density.
- B Locate the position of the following elements in the modern periodic table:
  - 1. H

2. 10 Ne

3. 20Ca

### Question

#### Mrite the scientific term:

- 1. They are the elements which have the properties of both metals and nonmetals.
- 2. A table in which the elements are arranged according to their atomic numbers.
- 3. It is the curved lines that join the points of equal pressure in atmospheric pressure maps.
- Safe places are specialized for protecting endangered species in their homeland.

143





موقع والكرولي التعليمي

ا العمل خاص بموقع ذاكرولي التعليمي ولا يسمح بتداوله على مواقع أخرى والمعلقة

# El-Dakahlia Governorate

Educational Directorate

Answer the following questions:

Question

Using the following diagram which represents a part of the periodic table, answer the following questions:

ιH											<sub>2</sub> He
3	X					5	6	Y	8	9	10
11	12								Z	17	G
19	М	N								35	36Kr

- 1. Write the letter(s) of the element(s) which is/are:
  - (1) among transition elements.
  - (2) located in period (3) and group (6A).
  - (3) among noble gases.
  - (4) considered among s-block.
  - (5) considered among p-block.
- 2. Choose:
  - (1) The letter (Y) represents ...... element.

a. oF

b. 80

c. 12Mg

d. 7N

(2) The letter (M) represents ..... element.

a. 12Mg

b. 16S

c. 20Ca

d. 18Ar

(3) The letter (N) is located in ..... block.

a. s

b. p

c. d

d.f

# 3. What is the atomic number of the elements (N) and (G)?

### B Problem:

If the temperature at sea level is 24.5°C, find the temperature at the top of troposphere layer if its thickness is 13 kilometre.

### Question

### A Choose the correct answer:

1. The properties of the element which has atomic number equals 17 are similar to the element which has atomic number equals .....

a. 7

b. 9

c. 15

d. 20

2. ..... is the lowest metallic element is group (1A).

a. Na

b. Cs

c. K

d. Li

المعاصرعلوم لغات (Notebook) / ۲ع/تيرم ١ (١٩: ١٩)

هذا العمل خاص بموقع ذاكرولي التعليمي ولا يسمح بتداوله على مواقع أخرى

الصف الثاني الأعدادي (دوك الكول الكولي) كتاب المع

a. MgO	b. FeO	c. CuO	d. CO <sub>2</sub>
4. The gas which i	s evolved on reactin	g alkali metals with v	vater is
a. oxygen.	b. nitrogen.	c. hydrogen.	d. helium.
<ol><li>The volume of loxygen gas.</li></ol>	hydrogen gas evolvii	ng from water electro	lysis is the volume of
a. equal to	b. twice	c. half	d. four times
6. One dobson uni	t is defined as		
a. 3 mm.	b 0.1 mm	c 0.01 mm	d 2 mm

- Ozone layer is found in the stratosphere layer, it's important to protect the life of organisms"
  - 1. What is the average thickness of ozone layer in atmosphere?
  - 2. What is the only element that forms ozone gas?
  - 3. Complete:
    - a. Ozone layer protects the Earth from the harmful effects of ...... radiation.
    - b. The thickness of ozone layer at STP is ......
  - 4. Put (✓) or (✗):

Ozone layer prevents penetration of all types of UV radiation.

# Question 3

- A Give reason for each of the following:
  - Mammoth fossil is preserved as a complete body fossil.
  - 2. Naming the bald eagle by this name.
  - 3. Water molecule is from polar compounds.
  - 4. The global warming phenomenon has negative effects on Earth.
- Arrange the following fossils starting with first appearance on the life stage with explanation:

(Cast fossil of fish - Mammoth fossil - Trilobite fossil - Archaeopteryx fossil)

# Question 4

- Write the scientific term of each of the following:
  - The continuous decrease in the number of a certain species of living organisms, without compensation until they all die out.
  - 2. A group of food chains connected with each other.
  - The environmental system that is not affected severely by the absence of one species of living organisms that live in it.

- 4. An aquatic plant used by pharaohs to manufacture writing papers.
- 5. Traces and remains of old living organisms that are preserved in the sedimentary rocks.
- 6. Safe places that are specified to protect the endangered species in their homeland.

#### B Calculate:

The percentage of erosion of ozone layer in a certain area, knowing that ozone degree at this area is 255 dobson.

### Ismailia Governorate

Educational Directorate

Answer the following questions:

Question

#### Choose the correct answer :

1. Elements of group (7A) are known as .......

a. inert gases.

b. alkali metals.

c. halogens.

d. alkaline Earth metals.

2. Meteors are burnt in ...... layer.

a. ionosphere

b. stratosphere

c. mesosphere

d. thermosphere

3. Elements of the same period in the modern periodic table have the same .......

a. number of energy levels.

b. atomic number.

c. number of electrons in the outermost energy level.

d. valency.

protectorate is the first one established in Egypt.

a. Ras Mohamed

b. Wadi Hetan

c. Saint Cathrine d. Petrified forest

Metal oxides are ..... oxides.

a. acidic

b. basic

c. both of them

d. no correct answer

6. All of the following are greenhouse gases except ......

a. CO,

b.O,

c. NO

d. CH,

Fossils are preserved in ..... rocks.

a. sedimentary

b. igneous

c. metamorphic d. no correct answer

8. There are ..... bonds between water molecules.

a. ionic

b. covalent

c. hydrogen

d. metallic

### B Give reasons for the following:

- 1. The lower part of stratosphere is suitable for flying aeroplanes.
- 2. Simple ecosystem is affected strongly by the absence of one of its species.
- 3. The atomic size increases by increasing the atomic number within the same group in the modern periodic table.
- 4. Stopping producing concorde aeroplanes.

## Mention one use for the following elements:

1. Radioactive cobalt 60.

2. Liquefied nitrogen.







43	
G.	$\mathbf{o}$
1	

# Question

- Correct the underlined words:
  - 1. The ozone layer is found in thermosphere layer.
  - 2. Ferns fossils indicate that the environment where they lived was a sea floor.
  - 3. Mg + 2HCl dil. Mg + Cl,
  - 4. Aneroid is an instrument used to determine the elevation of aeroplanes above sea level.
  - 5. Ice crystals have round shape and large volume.
  - 6. Copper reacts instantly with water and hydrogen gas evolves.
  - 7. Elements of p-block are organized in two groups.
- B What happens when...?
  - 1. Ascending up in troposphere (concerning: temperature and atmospheric pressure).
  - 2. Existence of ozone in conditions of standard temperature and pressure (STP).
- (If the temperature at the base of a mountain = 30°C and its height = 2000 m, Find the temperature at its top.
- Mention three ways to protect living organisms from extinction.

# **Question**

- A Complete the following sentences:
  - 1. Most of weather phenomena happen in ....... layer.
  - 2. Transition elements start to appear from period number ....... in the modern periodic table.
  - Archaeopteryx is the link between birds and ........
  - The ozone layer doesn't allow the penetration of all ...... ultraviolet rays.
  - 5. ..... is an example of polar compounds.
  - 6. Increasing of mercury concentration in drinking water causes .........
  - 7. Fluorine and chlorine exist in ...... state.
  - 8. ..... is from the negative effects of global warming phenomenon.
- B Locate the position of the following elements in the modern periodic table :

1. 20Ca

2. <sub>18</sub>Ar

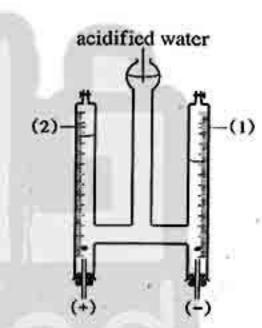
- Mention one example for each of the following:
  - 1. Fossils are found in El-Mokattam mountain.
  - One element from alkali metals.
  - An endangered bird.

4. A metalloid element.

### Question

4

- Write the scientific term of each of the following:
  - 1. A charged layer reflects radio waves.
  - 2. A kind of water pollution, which causes many diseases as typhoid.
  - The ability of the atom in a covalent molecule to attract the electrons of the chemical bond towards itself.
  - 4. Replacing part by part, the wood material of the trees by silica to form petrified fossils.
  - 5. The continuous increase in the temperature of the Earth's near-surface air.
  - 6. The region between stratosphere and mesosphere at which the temperature remains constant.
  - 7. A famous extinct animal in ancient periods.
- (B) Choose the odd word out:
  - 1. 2He / 10Ne / 18Ar / 11Na
  - 2. Dodo bird / Quagga / Papyrus plant / Mammoth.
  - 3. Cast / Fossil of a complete body / Fossil record / Petrified fossils.
- Examine the opposite figure, then answer:
  - 1. What is the name of this device?
  - 2. Label the numbers (1) and (2)?
  - Write down the balanced symbolic equation which represents the reaction.



# 19 Damietta Governorate

Damietta Educational Directorate

Answer the following questions:

#### Question

1

- ♠ Complete the following sentences :
  - 1. The atomic size is measured by ......, but the atmospheric pressure is measured by .......
  - 2. The ultraviolet radiation has a ...... effect and the infrared radiation has a ...... effect.
  - 3. Eating fish which contains high concentration of lead causes ......., but drinking water which contains high concentration of mercury leads to .......

  - 5. Basic oxides are ...... oxides and their solutions turn the litmus solution into .......

149

عذا العمل خاص بموقع ذاكرولى التعليمي ولا يسمح بتداوله على مواقع أخرى <u>تعاصونه</u>





مذا العمل خاص بموقع ذاكرولي التعليمي ولا يسمح بتداوله على مواقع أخرى والمعلقة

Final Examinations

#### Mention the harms of :

- 1. Storing water in plastic bottles of mineral water.
- 2. Melting the polar ice.

3. Overuse of freon.

#### Question

- Give reasons for:
  - 1. The lower part of stratosphere is suitable for flying aeroplanes.
  - Petrified woods are considered from fossils although they look like rocks.
  - Dissolving of sugar in water although it is among covalent compounds.
  - Occurrence of aurora phenomenon.
- What is meant by ... ?
  - 1. Fossils.
- 2. Chemical activity series.
- 3. Greenhouse effect.

- Correct the underlined words :
  - 1. Elements of d-block contain lanthanides.
  - Quagga is the most famous extinct animal in the old times.
  - Meteors burn in thermosphere layer.

# Kafr El-Sheikh Governorate

Educational Directorate

### Answer the following questions:

#### Question

### Choose the correct answer:

is a polar compound.

a. Petrol

b. Water

c.Alcohol

2. The main energy levels discovered by Bohr in the atom are .........

a.7

b.5

c.3

The first layer in the atmospheric envelope above the sea level is ........

a. mesosphere.

b.stratosphere.

c.troposphere.

4. Mammoth was preserved in ......

a resinous matter.

b. snow.

c.mud sediments.

# B Write the scientific term of each of the following:

1. One of components of the atmosphere that its percentage increased in recent years causing the greenhouse phenomenon.

151

هذا العمل خاص بموقع ذاكرولي التعليمي ولا يسمح بتداوله على مواقع أخرى الصف الثاني الاعدادي صحفاكي الكاني الاعدادي





# El-Behiera Governorate

Bani El-Delengate Official School

Answer the following questions:

#### Question

- Choose the correct answer:
  - Satellites orbit in ...... layer.
    - a. stratosphere
- b. exosphere
- c. mesosphere
- d. thermosphere

- 2. Ozone degree is measured by a unit called ..........
  - a. km.

- b. millibar.
- c. dobson.
- d. nanometre.
- 3. Which of the following fossils indicates that the environment, where they lived was a hot and rainy tropical environment? ......
  - a. Nummulites fossils.

b. Ferns fossils.

c. Coral fossils.

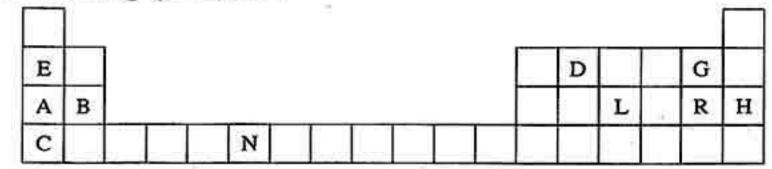
- d. Archaeopteryx fossils.
- 4. All of the following are ozone pollutants except .........
  - a. methyl bromide gas.
- b. CO,
- c. halons.
- d. CFC,

- B Mention the harms of :
  - Drinking water contains high concentration of mercury.
  - 2. Global warming phenomenon. (one harm)
- Mention one use for each of the following :
  - Liquefied nitrogen.

- Coral fossils.
- 3. Van-Allen belts.

### Question

From the following diagram which represents a part of the periodic table, answer the following questions:



[NB. The letters in the table don't represent the actual symbols of the elements]

- 1. Arrange the elements B, A, R, L descendingly according to the atomic size.
- 2. Complete the following:

The shaded part represents ...... elements.

- 3. Write the letter(s) of the element(s) which:
  - (a) Belong(s) to d-block.

(b) is/are from inert gases.

(c) Belong(s) to alkali metals.

المعاصرعلوم لغات (Notebook) /٢٤ / تيرم ١ (م: ٠٠)

هذا العمل خاص بموقع ذاكرولى التعليمي ولا يسمح بتداوله على مواقع أخرى





الصف الثائي الاعدادي

### Write the scientific term of each of the following:

- 1. It is a series in which metals are arranged in a descending order according to their chemical activity.
- 2. It is addition of any substance to the water which causes continuous gradual change in water properties affecting the health and the life of living creatures.
- 3. A type of ultraviolet radiations that is absorbed (95%) by the ozone layer.
- 4. It is the continuous decrease without compensation in the number of certain species of living organisms until all members of species die out.
- It is the solidified resinous matter which was secreted by pine trees in old geologic ages.

### Compare between each of the following:

1. Sodium (11Na) and calcium (20Ca). (According to: the position in the modern periodic table and the reaction with water)

2. Remains and mold. (according to : definition and example).

### Question

### Complete the following sentences:

- 1. The height of atmospheric envelope above sea level is ......km, while the normal atmospheric pressure equals ..... millibar.
- 2. CO<sub>2</sub> + H<sub>2</sub>O ----
- 3. Br<sub>2</sub> + 2KI ---- + .....
- 4. Moseley arranged the elements ascendingly according to ....... , while Mendeleev arranged the elements ascendingly according to .......
- 5. The crystal of ice has ...... shape.

### Choose the odd word out, and find the relation between the others:

1.9F/6C/35Br/17Cl

2. Dodo bird / Ibis bird / Bald eagle / Panda bear.

#### Question

### Correct the underlined words in the following statements:

- 1. Ammonites fossils are found in limestone rocks which form El-Mokattam mountain.
- 2. Infrared radiation has a chemical effect.
- 3. Hofmann's voltameter used in thermal analysis of acidified water.
- B Calculate the temperature at the top of a mountain, which its height is 4 km. If the temperature at the base of that mountain is 24°C.

### Give reasons for :

- 1. Water has high boiling point. Magnesium oxide is a basic oxide.
- 3. Ozone layer is formed in stratosphere.
- 4. Complicated ecosystem is not affected much by the absence of one of its species.

# El-Fayoum Governorate

Educational Directorate

Answer the following questions	:
--------------------------------	---

#### Question

- A Complete the following statements:
  - 1. Mendeleev arranged the elements ascendingly according to ........, while Moseley arranged them ascendingly according to ......
  - 2. The highest temperature layer in the atmosphere is ......... and the least temperature one is .....
  - 3. Dodo bird is ...... bird, while bald eagle is ..... bird.
  - 4. The scientist ...... discovered the main energy levels in the atom.
  - 5. There are ...... bonds between water molecules.
- B What is meant by ...?
  - 1. Fossils.

- 2. Semi-metals.
- Atmospheric pressure.
- Cocate the position of the following elements in the modern periodic table :
  - 1. 10 Ne

2. 19K

#### Question

A Correct the underlined words in the following statements:

- 1. Transition elements start to appear in the first period.
- 2. Increasing O2 concentration in the atmosphere produces the global warming phenomenon.
- Meteors burn in stratosphere.
- 4. Mammoth is an example of microfossils.
- 5. Sodium oxide is from acidic oxides.
- 6. Wadi El-Hetan protectorate is the first established natural protectorate in Egypt.
- B What is the importance of ...?
  - 1. Ozone layer.

2. Index fossils.

3. Cobalt 60

Mention one difference between: Cast and mold.

#### Question

- Write the scientific term of each of the following statements:
  - 1. The ability of the atom in a covalent molecule to attract the electrons of the chemical bond towards itself.

155

هذا العمل خاص بموقع ذاكرولى التعليمي ولا يسمح بتداوله على مواقع أخرى



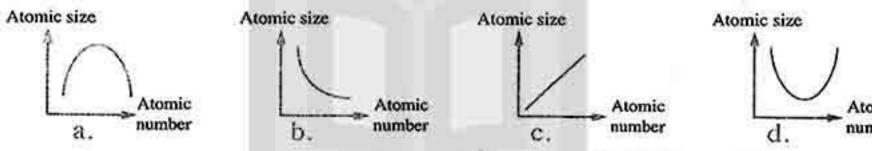




- 2. A type of water pollution is originated from discharging of factories wastes and sewage in canals, rivers and seas.
- 3. The continuous decrease in numbers of species members without compensation until they all die out.
- Metals are arranged descendingly according to their chemical activity.
- A charged layer reflects radio waves.

#### (B) Choose the correct answer:

- 1. ..... is located between stratosphere and mesosphere.
  - a. Tropopause
- b. Stratopause
- c. Mesopause
- d. Thermopause
- Graph ...... represents the graduation of the atomic size in the third period.



- is one of the most important causes of extinction in the recent ages.
  - a. Volcanic eruption

b. Falling of icebergs

c. Falling of meteorites

- d. Overhunting and environmental pollution
- 4. Fossils are often found in ..... rocks.
  - a. metamorphic
- b. sedimentary
- c. volcanic
- d. igneous
- 5. All of the following are from the properties of water except .........
  - a. it has a neutral effect on both of litmus papers.
  - b. it is a polar compound.
  - c. its volume increases by freezing.
- d. it decomposes by heat into its elements.

### What are the results of ... ?

- 1. Sodium isn't kept under kerosene or paraffin.
- 2. Storing water in plastic bottles of mineral water.

### Question

### A Give reasons for :

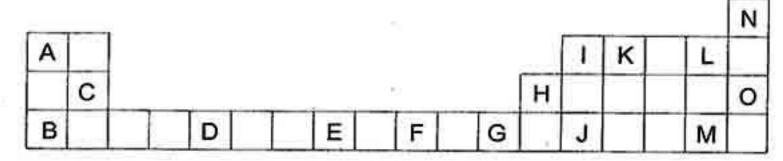
- Van-Allen belts play an important role in atmosphere.
- 2. Although sugar is a covalent compound, it dissolves in water.
- 3. Petrified woods are considered from fossils although they look like rocks.

# B Write the balanced chemical equations which express the following reactions:

- 1. The reaction between bromine and potassium iodide.
- Magnesium with dil. hydrochloric acid.

Final Examinations

- Calculate the height of a mountain if the temperature at its foot is 20°C and at its top is (-6°C).
- Study the following figure which represents a section of the periodic table, then answer:



[NB. The letters in the table don't represent the actual symbols of the elements]

#### Write the symbol(s) which indicate(s):

a. Halogens.

b. Inert gases.

c. The most active metal.

d. Transition elements.

# 23 El-Menia Governorate

St. Mark and El-Tawfik School

#### Answer the following questions:

# Question

- Choose the correct answer :
  - 1. The scientist ...... had discovered the main energy levels.
    - a. Moseley
- b. Bohr
- c. Hofmann
- d. Mendeleev
- 2. The atomic number of an element that exists in group (7A) and period (2) is ........
  - a. 12

b. 7

c. 9

- d. 17
- 3. Each period in the periodic table starts with a/an .........
  - a. metal.
- b. metalloid.
- c. nonmetal.
- d. inert gas.

- 4. ..... is considered from halogens.
  - a. Sodium
- b. Chlorine
- c. Helium
- d. Calcium

- 5. Ozone layer is found in ...... layer.
  - a. troposphere
- b. stratosphere
- c. mesosphere
- d. thermosphere
- Write the balanced chemical equations that illustrate the following reactions:
  - 1. Reaction of sodium with water.
  - 2. Reaction of magnesium with dilute hydrochloric acid.
  - Reaction of carbon dioxide gas with water.
  - 4. Reaction of chlorine gas with potassium bromide solution.

157







الصف التائي الأعدادي

# 2. Liver cancer. b. sodium. 3. Blindness. c. mercury. d. arsenic.

- B What's meant by each of the following ... ?
  - 1. Fossils.

2. Metalloids.

- 3. Aurora phenomenon.
- What will happen in each of the following cases ...?
  - 1. Storing water in plastic bottles of mineral water.
  - 2. The overuse of freon.

# 24 Sohag Governorate

Educational Directorate

Answer the following questions:

#### Question

1

- - The modern periodic table consists of ...... periods and the period number represents the number of .......
  - 2. Pure water boils at ..... and freezes at .....
  - Most weather phenomena occur in ....... layer, while satellites swim through the ..........
  - 4. From the reasons of recent extinction are ...... and ......
- B Mention one difference between:
  - 1. Acidic oxide and basic oxide (dissolving in water).
  - 2. Simple ecosystem and complicated ecosystem (example only).
- If the temperature at the sea level is 20.6°C. Find the temperature at the top of a mountain of height 2 km above Earth's surface.

### Question

2

- - 1. Cobalt 60 is used in food preservation.
  - Petrified woods are considered as fossils although they look like rocks.
  - 3. Elements of the same group have similar properties.
- B What happens when ...?
  - 1. The overuse of freon.
  - Adding dil. HCl to a piece of carbon.
  - 3. Decrease of water temperature less than 4°C.
- Mention the importance of :
  - 1. Van-Allen belts.

2. Altimeter.

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- 1. The scientist who discovered the main energy levels is ........
  - a. Mendeleev.
- b. Bohr.
- c. Rutherford.
- 2. Complete body fossils of insects are found preserved in .......
  - a. amber.
- b. snow.
- c. ocean.
- 3. All of the following gases are greenhouse gases except .......
  - a. CO,
- b. O

- c. CH
- 4. The density of ice is ...... the density of water.
  - a. less than
- 5. ..... is considered from halogens.

b. more than

c. Helium

c. equal to

- a. Sodium b. Chlorine
- The normal atmospheric pressure at the sea level equals ...... millibar.
- a. 1013.25 b. 76 c. 1.013 Write the chemical equations which represent the following reactions:
  - 1. Reaction of sodium with water.
  - 2. Reaction between chlorine gas and potassium bromide.
  - 3. Carbon dioxide with water.

#### Calculate the atomic number of :

- 1. Element (X) is located in the 3<sup>rd</sup> period and group (2A).
- 2. Element (Y) is located in the 1st period and group (1A).

# Question

### Write the scientific term:

- 1. Elements have the properties of metals and nonmetals.
- A charged layer reflects radio waves.
- A bond that exists between water molecules.
- 4. A unit used for measuring ozone degree.
- 5. An apparatus used in electrolysis of water.
- 6. Safe areas established to protect endangered species.

### B Correct the underlined words:

- 1. Fluorine is the only liquid halogen.
- 2. Chemical pollution of water causes many diseases as typhoid and hepatitis.
- 3. Meteors burn in stratosphere.
- 4. Archaeopteryx links between reptiles and mammals.
- Sodium chloride is from polar compounds.
- Cocate the position of the following elements in the modern periodic table:
  - 1. 10 Ne

2. 19K

3. 16S

# 25

# **Qena Governorate**

#### Educational Zone

Answer t	he	foll	lowing	quest	tions	:
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1

- Complete the following statements:
  - 1. In the modern periodic table, the elements are arranged according to ....... and ........
  - 2. The strongest metallic element is found in group ........
  - 3. The thickness of mesosphere layer is about ...... km.
  - 4. ..... and ..... are considered from ozone layer pollutants.
  - 5. The normal atmospheric pressure at the sea level equals ...... mb.
  - Fossils always exist in the ..... rocks.
- Write a definition for the following:
  - 1. Extinction.
- 2. Electronegativity.
- 3. Atmospheric pressure.

#### Question

2

- A Choose the correct answer:
  - 1. Which of the following fossils play an important role in petroleum exploration? ........
    - a. Foraminifera and radiolaria.

b. Nummulites and ammonites.

- c. Foraminifera and trilobite.
- 2. The ...... is/are used in preservation of agricultural crops.
  - a. methyl bromide gas
- b. halons
- c. nitrogen oxide
- 3. The coldest atmospheric layer is .......
  - a. troposphere.
- b. thermosphere.
- c. mesosphere.
- 4. The elements of group (7A) are known as .........
  - a. alkali metals.
- b. halogens.
- c. alkaline earth metals.
- 5. There is ..... bonds between water molecules.
  - a. ionic

- b. hydrogen
- c. covalent

- 6. Metal oxides are ..... oxides.
  - a. acidic

- b. basic
- c. amphoteric
- 7. Which of the following fossils indicates that the environment, where they lived was clear warm and shallow seas?........
  - a. Nummulites fossils.
- b. Ferns fossils.
- c. Coral fossils.

المعاصرعلوم لغات (Notebook) / ۲ع / تيرم ١ (٢ : ٢١)

161





B Compare between :

The stratosphere layer and the mesosphere layer (in view of pressure and temperature).

PA 2

# Cairo Governorate

New Cairo Educational Zone Manor House School

# Answer the following questions:

# Question 1

- Complete the following:
  - 1. ..... is an example for metalloids.
  - 2. ..... is from the recent extinct animals.
  - 3. ..... are curved lines that join parts of equal atmospheric pressure.
- (B) Write the scientific term:
  - 1. The nonmetal element which is used in preservation of eye cornea.
  - 2. The hottest layer in the atmospheric air.
- What is the thickness of troposphere layer? if the temperature at sea level is 24.5° C Find the temperature at the highest point.

# Question 2

- A Choose the correct answer:
  - 1. The atmospheric pressure is measured in ...... unit.
    - a. millibar

b. Dobson

c. nanometer

- 2. Meteors are formed in ......
  - a. mesosphere.

- b. stratosphere.
- c. troposphere.

B Give reasons for:

The atomic size of elements in the same period decreases as their atomic number increases.

- © Correct the underlined words:
  - 1. Ozone gas is found in troposphere layer.
  - 2. Quagga is from endangered species.
  - 3. Inert gases are active gases.

# Question 3

- What is meant by ... ?
  - 1. Polar compounds.
- Water pollution.
- 3. Protectorates.

- B Compare between:
  - Troposphere and stratosphere layers.

64

هذا العمل خاص بموقع ذاكرولي التعليمي ولا يسمح بتداوله على مواقع أخرى والمعلقة





Workbook

Final Exams

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	Comp	lata	tha	foll	Daima	equations	
	Comp	icic	uic	1011	OWING	equations	

- 1. Mg + 2HCl(dil.) -----+ --------+
- 2. Br<sub>2</sub> + 2Kl --- + ...... + ......
- 3. MgO + H<sub>2</sub>O → ......

# Question 4

- What happens when …?
  - 1. The ratio of mercury increases in water.
  - Hydrogen molecule combines with oxygen atom.
- What are the uses of ... ?
  - Sodium in liquid state.
- 2. Aneroid.
- 3. Cobalt 60

#### Write the scientific term :

- 1. A series in which metals are arranged in a descending order according to their chemical activity.
- The apparatus which is used in water electrolysis.
- A charged layer reflects radio waves.

# Cairo Governorate

El Nozha Educational Administration St. Fatima Lang. School

#### Answer the following questions:

# Question 1

- Choose the correct answer :
  - 1. The scientist ...... had discovered the main energy levels.
    - a. Moseley
- b. Bohr
- c. Hofmann
- d. Moustafa
- 2. The modern periodic table consists of ...... horizontal periods.

b. 10

- d. 18
- 3. Atmospheric pressure is the ....... of air column of an atmospheric height on a unit area.
  - a. mass

- b. volume
- c. weight
- d. density

- 4. Ozone layer is found in ...... layer.
  - a. troposphere
- b. stratosphere
- c. mesosphere
- d. thermosphere

- 5. ..... is an example of microfossils.
  - a. Mammoth
- b. Ferns
- c. Foraminifera
- d. Archaeopteryx

### B Give reasons for :

- Sodium is kept under the surface of kerosene.
- 2. Liquefied nitrogen is used in preservation of cornea of the eye.
- 3. The continuity of ozone layer erosion.
- What is meant by greenhouse gases ?

المعاصرعلوم لغات (Workbook & Final Exams) ۲۲/ تيرم ١ (٩: ٩)



#### Workbook Final Exams

# Cairo Governorate

Heliopolis Educational Admin. St. Joseph's School

Answer the following questions:

Question

- Choose the correct answer :
  - 1. The number of electrons in the outermost energy level in 20 Ca is ..........

- 2. The number of period in 10 Ne atom is .......

c. 3

d. 4

- Give reason for each of the following:
  - 1. The simple ecosystem is severely affected by the absence of one type of species.
  - Halogens exist in chemical compounds and not individually in nature.

# Question (

- Write the scientific term:
  - 1. Elements that have both properties of metals and nonmetals.
  - 2. A pollution originated from mixing of animals and human wastes with water.
- B What happens when ...?
  - The concentration of greenhouse gases increases in the atmosphere.

# Question (

- Correct the underlined words:
  - 1. The distribution of the charged ions extends 700 kms above the sea level is known as the troposphere.
  - Basic oxides dissolve in water forming acids.
- B Write the proper group and period in the periodic table for each of the following:
  - 1. 19K

- 3. 11Na
- 4. 13Al

- Define each of the following :
  - 1. Petrification.

Electronegativity.

# Question (

- Why is the radioactive Cobalt 60 used in food preservation?
- Complete the following symbolic equations:
  - 1. ..... + 2HCl(dil.) MgCl<sub>2</sub> + ......
  - 2. ..... + 2KI ---- 2KBr + ......
- Explain each of the following :
  - 1. The Mammoth fossil was found to be completely preserved.
  - 2. The density of water in its solid state is lower than in its liquid state.



### Cairo Governorate

Heliopolis Educational Zone St. Clare's College

#### Answer the following questions:

# Question 1

- Complete the following sentences:
  - Mendeleev arranged the elements according to ........, while Moseley arranged the elements according to ........
  - 2. There are ...... bonds between water molecules.
  - During the formation of ozone layer, oxygen molecule absorbs ........., which breaks the bond between the two atoms.
  - 4. Nonmetal oxide dissolves in water giving ....... , which turns litmus paper into ........
- What is the importance of ...?
  - 1. Hofmann's voltameter.
- 2. Van-Allen belts.
- 3. Altimeter.

- Two elements  $^{35}_{17}$ Y and  $^{39}_{19}$ X , find :
  - 1. The electronic configuration.
- 2. The group number.
- 3. The period number.

# Question 2

- Write the scientific term:
  - Gradual decrease in the number of living organisms without compensation until all die out.
  - 2. A liquid metal acts as a heat conductor in nuclear reactors for generating electricity.
  - The traces and remains of old living organisms which are preserved in the sedimentary rocks.
  - The ability of covalent molecule to attract electrons in chemical bond.
  - 5. The elements that have both properties of metals and nonmetals.
  - 6. A phenomenon due to increase the percentage of CO<sub>2</sub> gas and leads to increase the temperature of atmosphere.
- (B) Give reasons for :
  - 1. Sodium and potassium should be kept under kerosene.
  - 2. Pilots prefer to fly their planes at the lower part of stratosphere layer.
  - 3. The elements of the same group have similar properties.
  - 4. Pure water doesn't affect litmus paper.

68

هذا العمل خاص بموقع ذاكرولى التعليمي ولا يسمح بتداوله على مواقع أخرى والعمولية





كتاب

موقع والكرولي التعليمي

الصف الثائي الاعدادي

# Question 3

- Write the scientific term:
  - 1. A phenomenon that appears as brightly colored light curtains seen from both the poles of the Earth.
  - 2. Different forms of nuclei of the same element having the same atomic number but different in the atomic weights.
  - 3. A kind of rays with wavelength 280: 315 nm.
- B Compare between:
  - The simple ecosystem and the complicated ecosystem.
  - Dodo bird and ibis bird.
  - 3. Magnesium oxide and sulphur oxide.
- Awareness about the importance of protecting natural life increased after great harmful consequences that have appeared since the mid 20th century. Explain three ways to protect the endangered species.

# Question (

- Correct without changing the underlined phrases:
  - 1. By increasing the atomic number within a period the metallic property increases.
  - Liquefied nitrogen is used in food preservation.
- (B) Mention one example for :
  - 1. A petrified fossil.
  - A natural protectorate found in South Sinai in Egypt.
  - An alkali metal that is kept under the surface of paraffin oil only.
- What happens when ...?
  - Adding the purple sunflower solution to a jar has a piece of burning coal.
  - Dissolving potassium in water.
  - 3. The pollution of water with animals and human wastes.

# Cairo Governorate

El Maadi Educational Department Manarat El Maadi Language School

#### Answer the following questions:

# Question •

- Write the scientific term:
  - 1. The weak electrostatic attraction between water molecules.
  - 2. The ability of the atom in covalent molecule to attract the chemical bond electrons to it.
  - 3. The vertical column in Mendeleev's table.
  - 4. The traces and remains of old living organisms which are preserved in sedimentary rocks.
  - 5. The hottest atmospheric layer.
  - A unit used for measuring ozone degree.





<b>2</b>	
<b>A</b>	

- B Give an example for :
  - 1. A metalloid.

- 2. An acidic oxide.
- 3. A substance has bad effect on ozone layer.
- 4. A water pollutant causes damage of brain cells.

### Question (

- Choose:
  - 1. The transitional elements start to appear from period .........
    - a. 2

b. 3

c. 4

- d. 5
- 2. Electronic configuration of the ions of all the following is similar to that of 18 Ar except .........
  - a. 15P

- b. 16S
- c. 11Na
- d. 17Cl

- 3. Water has ..... effect on litmus paper.
  - a. basic

- b. acidic
- c. neutral
- d. alkaline

- 4. The ozone layer found in ...... layer.
  - a. troposphere
- b. stratosphere
- c. mesosphere
- d. thermosphere

N

- Write the balanced chemical equation for the following:
  - 1. Reaction of sodium with water.
  - Reaction of magnesium with dilute hydrochloric acid.
  - 3. Reaction of carbon dioxide with water.
  - 4. Two steps of ozone formation from oxygen by UV.

### Question •

- Write the importance of:
  - 1. Halons.

2. Liquid nitrogen.

Overuse of freon.

- 4. Altimeter.
- B Study the opposite figure which represents a section of the periodic table, then answer:

What is the symbols which indicate the:

- 1. Inert gases.
- 2. Alkali metals.
- 3. Halogens.

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### Question 4

- Locate the position of the following elements in the modern periodic table :
  - 1. <sub>13</sub>Al

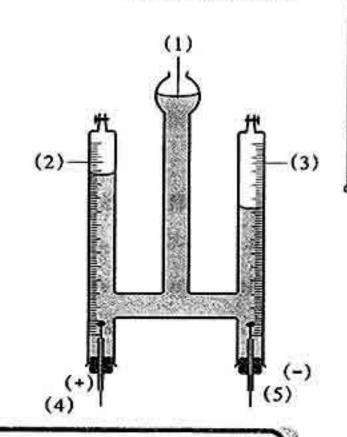
2. <sub>8</sub>O

3. 10Ne

4. 20Ca

#### Final Exams

- From the opposite figure, answer the following questions:
  - 1. What is the name of this apparatus?
  - 2. Label the numbers (1), (2), (3), (4) and (5)?
  - 3. Calculate the volume of the gas that evolves at the positive pole if the volume of the gas at the negative pole is 20 cm<sup>3</sup>.



### Cairo Governorate

Shoubra Educational Zone Good Shepherd School El-Attar

#### Answer the following questions:

#### Question 1

- Choose the correct answer :
  - 1. Meteors burn in .....
    - a. mesosphere.

b. ionosphere.

c. stratosphere.

- 2. The number of groups in p-block is ......
  - a. 5

b. 6

- c. 7
- 3. ..... is located between stratosphere and mesosphere.
  - a. Tropopause

b. Stratopause

c. Mesopause

- 4. An example of complete body fossil is ........
  - a. mammoth.

b. cast.

c. mold.

#### Correct the underlined words:

- 1. The polar compound is an ionic compound, the electronegativity difference between its elements is relatively high.
- Panda bear is an example of extinct species.
- 3. Ultraviolet radiation has a thermal effect.
- The mold is a copy of external shape of the shell.
- Write the balanced chemical equations which express the following:
  - 1. Reaction of carbon dioxide with water.
  - Reaction of chlorine with potassium bromide.

# Question 2

- Complete the following statements:
  - 1. .......... and ......... are microfossils used in petroleum exploration.
  - 2. The ecosystem is classified according to degree of effect into ......... and ..........

المعاصرعلوم لغات (Workbook & Final Exams) اع / تيرم ١ (١٠:١)



الصف الثاني الأعدادي (مرتع الكرالي التعليم) كتاب الم

**Final Exams** 

2. From	greenhouse	gases	are	*********	and		
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- 3. Cl<sub>2</sub> + 2KBr ---- + ......
- 4. Carbon dioxide gas is ...... oxide, while magnesium oxide is ...... oxide.
- 5. Fossils are used in ..... exploration and determining the age of ......

### Locate the position and type of the following elements in the modern periodic table:

- 1. He
- 2. 17Cl

3. ,,Na

# Question (

### Write the scientific term of the following:

- 1. A layer of atmosphere in which satellites float.
- 2. The gas evolved at the cathode of Hufmann's voltameter.
- 3. They are natural safe areas to protect the endangered species.
- 4. A bright coloured light curtains are seen at two poles of Earth.

#### B Give reasons for :

- 1. Limestone rocks of El-Mokattam's mountain contain nummulites fossils.
- 2. Sodium and potassium are kept under kerosene surface.
- 3. The lower part of stratosphere layer is suitable for flying planes.
- Liquefied nitrogen is used in preservation of cornea.

# Question 3

- Calculate the height of a mountain if the temperature at its base is 25°C and at its top is (-14)°C.
- B Choose the correct answer:
  - 1. An example of microfossils is ......
    - a. mammoth.
- b. fern.
- c. radiolaria.
- d. archaeopteryx.
- 2. The largest atomic size in these elements has atomic number ......
  - a. 7

- d. 17
- 3. All of the following are extinct species except ........
  - a. dodo bird.
- b. bald eagle.
- c. quagga.
- d. dinosaur.

- 4. The coldest layer is ...... layer.
  - a. exosphere
- b. troposphere
- c. stratosphere
- d. mesosphere

### Mention the importance of :

1. Van-Allen belts.

2. Cobalt 60.

# Question 4

- A Show by the symbolic equations only how is the ozone gas formed?
- B What is meant by ...?
  - 1. Global warming.
- 2. Fossils.
- 3. Metalloids.
- Compare between simple ecosystem and complicated ecosystem. (two points).

# Giza Governorate

Experimental Directorate Dr. Ahmed Zewail G.L.S

Answer the following questions:

# Question 1

Complete the following statements:

1. The hottest layer in the atmosphere is ......, while the coldest layer is .......

2. From greenhouse gases are ...... and ......

3. Archaeopteryx is a fossil that links between ......... and ...........

4. Ultraviolet rays have ...... effect, while infrared rays have ...... effect.

What is meant by ...?

Fossils. 1. Electronegativity.

### Question 2

Choose the correct answer :

1. All of the following are endangered species except .........

a. panda bear. b. bald eagle. c. quagga.

2. The normal atmospheric pressure at the sea level equals ...... mb.

b. 1013.25 c. 1.013 a. 76

3. Luminous meteors are formed in ...... layer.

d. mesosphere c. exosphere a. ionosphere b. stratosphere

4. Complete body fossils of insects are found preserved in ......

a. amber. b. snow.

c. sedimentary rocks. d. ocean.

**B** Mention the function of :

2. Hofmann's voltameter. 1. Altimeter.

Natural protectorate. 3. Cobalt 60.

C Compare between:

1. Simple ecosystem and complicated ecosystem.

2. Basic oxide and acidic oxide.

# Question 3

Give reason for each of the following:

1. The lower part of stratosphere is a suitable for flying aeroplanes.

2. Elements of the same group have the same properties.

Group (1A) is called alkali metals.

76

هذا العمل خاص بموقع ذاكرولي التعليمي ولا يسمح بتداوله على مواقع أخرى



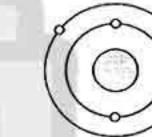
d. rhinoceros.

d. 760

- Mention the name of the scientist who :
  - Discovered that the atom has 7 energy levels.
  - Discovered that the nucleus has positive charges called protons.
  - 3. Postulated that the thickness of ozone layer is 3 mm at STP.
- Write the balanced chemical equation which expresses the following reactions:
  - 1. Putting a piece of sodium in water.
  - Burning magnesium ribbon in air.
  - Passing chlorine gas in potassium bromide solution.

### Question (

- Write the scientific term :
  - 1. Phenomenon that appear as a bright colours at the two poles.
  - 2. The death of all members of species of living organisms.
  - 3. Oxides that cause ozone hole and result from burning of fuel of concorde planes.
  - 4. Thinning or losing parts of ozone layer.
  - 5. Any change in the water properties that harm the human health or life.
- Study the opposite figure which explains the electronic configuration for an element in the modern periodic table. Calculate the atomic number of the element which follows this element in:



1. The same period.

- 2. The same group.
- O Problem: Calculate the temperature at the top of a mountain if its height is 4 km and the temperature at its foot is 30°C.

### Giza Governorate

Beu-lake Directorate Dar El-Hanan L.S.

### Answer the following questions:

# Question 1

- Complete the following statements:
  - 1. The scientist ...... discovered the main energy levels around the nucleus, while the scientist ...... discovered the positive protons inside the nucleus.
  - 2. The coldest layer in atmosphere is ...... but the hottest layer is .........
  - 3. Archaeopteryx represents the link between ...... and .......
- B What is meant by ... ?
  - 1. Chemical activity series.

- 2. Index fossil.
- @ Problem: Find the temperature at the top of a mountain, its height is 3 km if the temperature at sea level is 20°C.

# PART

# Question 2

The opposite figure represents a part of the modern periodic table :

R

E

1. What is the kind of	
(X - M - D)	
elements?	

- 2. What is the atomic no. of (B) element?
- 3. What is the shaded area represent?

10.0044	DAMESTO SOCIAL MODEL FILL STOCK OF	
1	Indicate	٠
4.	Indicate	٠

- a. The most active metal.
- b. The largest size element in second period.

#### (i) Give one example for:

1. A trace.

2. An ozone pollutant.

M

3. An extinct bird.

4. A greenhouse gas.

### Question 3

#### Give reasons for :

- 1. Liquefied nitrogen used in preserving eye cornea.
- 2. Rain, clouds and wind happen in troposphere.
- 3. Stop production of concorde (ultrasonic) planes.

#### (B) Compare between:

- 1. Mesosphere layer and stratosphere layer (in view of temperature and importance).
- Simple ecosystem and complicated ecosystem.

### Question 4

### Write the scientific term for the following statements:

- 1. The ability of the atom to attract the bond electrons to itself in the covalent compound.
- 2. An atmospheric layer in which the atmosphere is inserted into the outer space.
- 3. Replacing part by part the original wooden material by silica.
- 4. Safe places which protect the endangered species in their homeland.
- Write the chemical equation that indicates the following: Reaction between magnesium with oxygen gas.

### Mention one importance for :

1. The two Van-Allen belts.

2. Fossils.

78

هذا العمل خاص بموقع ذاكرولى التعليمي ولا يسمح بتداوله على مواقع أخرى والمعلق





الصف الثائي الاعدادي

_	Workbook	N
g	Final Exams	5

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El-Haram Educational Zone Sakkara Language School

Answer	the	fo	llowing	questions	:
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1. Each period in the modern p	periodic table starts with and ends with	
--------------------------------	--	--

2. ..... and ..... are from the extinct animals in the old ages.

ate

- Elements of group (1A) are called ...... metals.
- 4. Ultraviolet radiations have ...... effect, while infrared radiations have ...... effect.
- Archaeopteryx represents the link between ...... and ......

### Question 2

#### Write the scientific term:

- 1. The ability of the atom in the covalent molecule to attract the electrons of the chemical bond towards itself.
- 2. Two magnetic belts help in dispersing the harmful cosmic radiations away from the Earth.
- 3. Fossils of living organisms lived for a short period of time and in a wide geographical range and then became extinct.
- 4. The death of all members of a certain species of living organisms.
- The block in the modern periodic table which contains series of lanthanides and actinides.
- A layer of the atmospheric envelope in which the air moves vertically.

### Mention one difference between:

- 1. Mendeleev's periodic table and Moseley's periodic table.
- Mesosphere and thermosphere.

# Question (3)

#### Choose the correct answer:

- 1. The elements which occupy the middle block of the modern periodic table are called ..... elements.
  - a. alkaline b. inert

- c. halogen
- d. transition

- There are ...... bonds among the water molecules.
  - a. ionic

- b. covalent
- c. hydrogen
- d. metallic
- 3. The scientist who discovered the main energy levels is ........
  - a. Rutherford.
- b. Moseley.
- c. Bohr.
- d. Mendeleev.
- 4. All of the following are greenhouse gases except ......
  - a. CO,

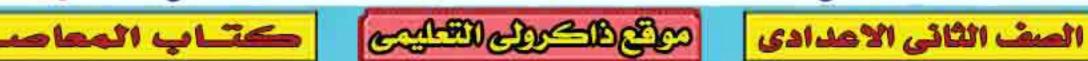
b. O

- c. N,O
- d. CH

79

هذا العمل خاص بموقع ذاكرولي التعليمي ولا يسمح بتداوله على مواقع أخرى





# Question (

### Choose:

1. From gaseous elements in group (7A) is .......

a. chlorine.

b. iodine.

c. fluorine.

d. (a and c) together.

2. When water freezes, its density ......

a. increases.

b. decreases.

c. doesn't change. d. risesup.

3. From types of fossils is are .......

a. petrified fossils.

b. mold.

c. cast.

d, all of them.

From complete body fossils is .........

a. dinosaur.

b. radiolaria.

c. mammoth.

d. worm.

5. If hydrogen volume in water electrolysis is 20 cm<sup>3</sup>, so oxygen volume will be ........

a. 5 cm<sup>3</sup>

b. 10 cm<sup>3</sup>

c. 20 cm3

 $d.40 \text{ cm}^3$ 

6. Halogens are called by this name because they react with ...... forming salts.

a. acids

b. bases

c. water

d. metals

#### Mention one use for:

1. Liquefied nitrogen.

2. Aneroid.

### Question 3

#### Mention the scientific term:

- 1. Continuous increase of the average temperature of the air near the surface of the Earth.
- An animal is considered midway between horse and zebra.
- 3. A type of ultraviolet radiations that is absorbed mostly (95%) in the ozone layer.
- 4. Fossils of organisms lived in the past for a short time then extinct.
- 5. Safe places established to protect endangered species in their natural environment.
- The scientist who discovered that the nucleus of atom contains positive protons.
- 7. The ability of atom in covalent molecule to attract the bond electrons to it. 8. The death of all members of certain species of living organisms.
- B Locate the position of 19 K in the modern periodic table.

### Question 4

#### Correct the underlined words :

- 1. There are covalent bonds between water molecules.
- 2. From endangered birds is quagga.
- 3. Fossils are preserved in igneous rocks.
- 4. Date of death of last individual of species is called fossils.
- 5. From non-polar compounds is ammonia.
- 6. The unit of measuring atomic radius is Dobson unit.

### B Give reasons for :

- 1. Pilots prefer to fly at the lower part of stratosphere.
- Dodo bird is an easy target for hunters.

المعاصرعلوم لغات (Workbook & Final Exams) / ٢٦ / تيرم ١ (١١:١١)

بموقع ذاكرولي التعليمي ولا يسمح بتداوله على مواقع أخرى





هذا العمل خاص بموقع ذاكرولي التعليمي ولا يسمح بتداوله على مواقع أخرى

الصف الثاني الأعدادي صح الكواكول التعليم

Fi	na	F	×	a	m	5
			$^{\sim}$	α		-

0	On electrolysis of a certain volume of acidified water, if the volume of evolved g	jas
7750	above the anode was 2.5 cm <sup>3</sup> :	50

- Calculate the volume of the evolved gas above the cathode.
- 2. What is the name of the gas that evolves above the anode and above the cathode?
- 3. Mention the name of the apparatus which is used in this process.

#### Put (√) or (x) and correct the mistakes :

- 1. The covalent bond becomes ionic when the difference in electronegativity between the bonded atoms = zero.
- 2. All the atmospheric phenomena like rain, wind and clouds occur in the ionosphere.
- 3. The elements with the same physical and chemical properties have been put in vertical columns.

### Question 6

- Give the scientific reasons for the following:
  - · Fossils have importance.
- Complete the following sentences:
  - 1. Each period in the modern periodic table starts with ........ and ends with .......
  - 2. Sodium is kept under the surface of ....... , so as not to react with ........
  - 3. Satellites float in ...... layer, while pilots prefer to fly in the lower part of ...... layer.
  - 4. Ultraviolet radiation has a ...... effect, while infrared radiation has a ...... effect.

### Mention an example for each of the following:

1. Endangered species.

- 2. A gaseous halogen.
- 3. A fluorochlorocarbon compound.

### Alexandria Governorate

Saint Vincent De Paul School

#### Answer the following questions:

### Question 1

### Choose the correct answer :

- 1. Mammoth fossil is an example of ...... fossils.
  - a. cast

- b. mold
- c. petrified
- d. complete body

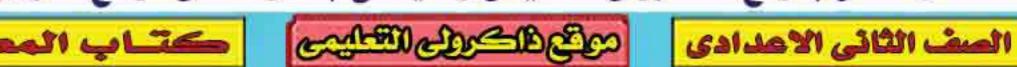
- 2. Lanthanides are located in ...... block.
  - a. (s)

- b. (d)
- c. (f)
- d. (p)

- 3. Aluminium (13Al) is located in ........
  - a. period 3.
- b. period 2.
- c. period 7.
- d. period 5.

هذا العمل خاص بموقع ذاكرولي التعليمي ولا يسمح بتداوله على مواقع أخرى





4. Adding drops of ..... to water during its electrolysis.

a. nitric acid

b. sulphuric acid

c. hydrochloric acid

c. no correct answer

#### B Give reasons for :

- 1. Melting of ice of south and north poles.
- 2. Ammonia is considered a polar covalent compound.
- 3. The atomic size of 11Na is greater than 17Cl.
- 4. The lower part of stratosphere is suitable for flying aeroplanes.
- (a) If the temperature at the foot of a mountain is 40°C. Calculate the temperature at its top if the height of the mountain is 3 km.

# Question 2

- Complete the following:
  - 1. Ozone degree is measured in a unit called ......
  - 2. ..... is the weight of air column of an atmospheric height on a unit area.
  - 3. A sticky matter secreted from the pine trees to form the fossil of ......
  - 4. The scientist ...... had discovered the energy levels.
- B Compare between:
  - 1. Altimeter and aneroid.

2. Basic oxides and acidic oxides.

### Question 3

- Write the scientific term:
  - 1. Rays which are emitted from cobalt (60).
  - 2. Elements have the symbol (B).
  - 3. Two magnetic belts help in dispersing the harmful radiation away from the Earth.
  - 4. Substitution of silica in place of wood without changing in the form.
  - 5. Organic matter prevents alkali metals from reacting with moist air.
- Write the chemical equations which express the following:
  - 1. Reaction of bromine with potassium iodide.
  - 2. Electrolysis of water.
  - 3. Reaction of magnesium with hydrochloric acid.
- Oraw the bonds between the atoms and molecules in water.



- N What is meant by ...?
  - 1. Electronegativity.

Metalloids.

- Aurora phenomenon.
- Global warming phenomenon.

84

هذا العمل خاص بموقع ذاكرولي التعليمي ولا يسمح بتداوله على مواقع أخرى





#### Correct the underlined words:

- 1. Each period ends by a nonmetal element.
- 2. Halogens are monovalent metals.
- 3. Normal atmospheric pressure equals 76 millibar.
- 4. The halons are produced from supersonic airplanes.

# 15 Alexandria Governorate

East Educational Zone Sidi Gaber Language School

#### Answer the following questions:

# Question 1

### Give a scientific term for each of the following statements:

- 1. Safe areas established to protect endangered species in their homeland.
- 2. Ability of an atom to attract the electrons of a chemical bond.
- 3. Arrangement of elements in a descending order according to their chemical activity.
- 4. An atmospheric layer that contains 75% of the mass of atmospheric air and in which all weather phenomena occur.
- 5. Traces and remains of old living organisms that are preserved in sedimentary rocks.
- 6. A block in the periodic table that contains groups from (3A) to (7A).
- 7. Elements having the properties of metals and nonmetals.

### (B) What would happen if ... ?

- 1. Ionosphere wasn't surrounded by two magnetic belts.
- 2. Methyl bromide was overused as an insecticide.

### Question 2

### A Complete the following sentences:

- In the modern periodic table, the strongest ......... lie in group (1A), while the strongest ....... lie in group (7A).
- 2. Liquefied nitrogen is used to preserve ....... , while liquid sodium is used in .......
- 3. Van-Allen belts cause the ...... phenomenon which takes place in the two poles of ........
- 4. In water molecules, there are two ...... bonds, the angle between them is ......
- 5. ..... and ..... are two gaseous halogens.
- 6. Archeopteryx represents the link between ...... and ......
- 7. ..... and ...... are from the most dangerous pollutants of ozone layer.

### B Give reason for each of the following:

- 1. Pilots prefer flying in the stratosphere layer.
- 2. Water shouldn't be used to put off a sodium fire. (Give a balanced chemical equation)

# Question 3

Choose the correct answer:

1. An element <sub>17</sub>X is similar to ......

a. 2A

b. 19Z

c. L

d. 7Y

discovered that a nucleus contains positively charged protons.

a. Mendeleev

b. Einstein

c. Rutherford

d. Bohr

Meteors are formed in ...... layer.

a. mesosphere

b. ionosphere

c. stratosphere

d. exosphere

4. All of the following are endangered species except .........

a. quagga.

b. bald eagle.

c. panda bear.

d. ibis bird.

All of the following diseases are caused by biological pollution except .........

a. bilharzia.

b. typhoid.

c. hepatitis.

d. cancer.

All of the following are greenhouse gases except ........

a. CH

b. N<sub>2</sub>O

d. CO2

7. ..... is a natural protectorate characterized by the presence of rare coral reefs and coloured fish.

a. Panda protectorate

b. Ras Mohamed protectorate

c. Bluestone protectorate

d. Wadi Hetan protectorate

Complete and balance the following equations:

1. Mg + ..... MgCl<sub>2</sub> + H<sub>2</sub>  $\uparrow$  2. CO<sub>2</sub> + H<sub>2</sub>O  $\longrightarrow$  ......

3. Br<sub>2</sub> + 2KI ---- + ......

### Question 4

Correct the underlined word(s):

Ice crystals have pentagonal shape.

2. Thermal pollution originates from leakage of radioactive substances from nuclear reactors.

3. Water has a basic effect on litmus paper.

4. Ferns fossils indicate that they lived in clear, warm and shallow seas.

B Calculate the height of a mountain given that the temperature at its base = 40°C and at its top = -12°C.

Give two negative effects for global warming phenomenon.

D Locate the position of the following elements in the modern periodic table:

1. 40Ca

2. 27Al

# 16 El-Kalyoubia Governorate

Science Inspectorate

Answer the following questions:

o	1000000		٤.
	Question		b
ı,	4000	v	ø

- Complete the following sentences:
  - 1. 2H<sub>2</sub>O Electrolysis + .....
  - Lithium and sodium ...... on the surface of water as their densities are ...... than water density.
  - There are three types of ultraviolet rays, near ultraviolet rays, ...... ultraviolet rays and ...... ultraviolet rays.
  - The atmospheric envelope height from sea level is ......., while normal atmospheric pressure equals ...... millibar.
  - 5. .... + ..... Dilute MgCl<sub>2</sub> + H<sub>2</sub>
- B Locate the position of the following elements in the modern periodic table:
  - 1. <sub>13</sub>Al

2. 10 Ne

3. <sub>17</sub>Cl

© Compare between the following:

Simple ecosystem and complicated ecosystem and mention examples.

# Question 2

- Write the scientific term for each of the following sentences:
  - The traces and remains of the old living organisms which are preserved in sedimentary rocks.
  - 2. The elements that have the properties of metals and nonmetals.
  - They are two belts surround the atmosphere from outside and help in scattering the harmful cosmic radiations come from the Sun.
  - 4. Safe places that are specified to protect the endangered species in their natural environment.
- B Give reasons for :
  - 1. Water and ammonia are polar compounds.
  - Cobalt 60 is used in food preservation.
  - Ionosphere layer is important for radio stations.
- (a) If the temperature at the foot of Everest mountain is 22.6°C, find the temperature at its top of a height 8862 m. above the Earth's surface.

# Question 3

- A Choose the correct answer:
  - 1. Ice crystals have ..... shape.
    - a. hexagonal
- b. square
- c. pentagonal
- d. triangular

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vv	u		n	u	v	u	n

Final Exams

			Final Exams
production of mici	robical cells.	use it emits rays	which prevent the
<ol> <li>Cl<sub>2</sub> + 2KBr ———</li> <li>The bond between bonds among water</li> </ol>		rogen atom in water m bonds.	olecule is, while
		which form El-Mokat	tam's mountain.
(B) Calculate the atomi			
		t and locates in the thir	rd period
2. A noble gas locate:			- poriou.
	ted in the 1st period an	d group (1A).	
Problem :			
If the temperature at	the top of a mountain i	is -5°C and at a point is temperature at its base	n its middle is 8°C,
Question 2	i the mountain and the	temperature at its base	е.
Choose the correct a	inswer:		
CONTROL NO. 100 P. C. P. P. C. P. C. P. C. P. C. P. P. P. C. P.	nents which exist in n	ature is	
a. 99	b. 118	c. 24	d. 92
<ol><li>The elements whice elements.</li></ol>	h occupy the middle b	lock (d) in the periodic	table are called
a. transition	b. alkali	c. alkaline Earth	d. noble
<ol><li>If the sum of volun so, the volume of o</li></ol>	nes of evolved gases at xygen gas and hydrog	t two poles of Hofmani en gas is respect	n's voltameter is 60 cm <sup>3</sup> tively.
a. 20:40	b. 40:20	c. 30 : 30	d. 15:45
100 Table 1 March 100 2 2000 2000	much vaccumed layer.		
a. troposphere	b. stratosphere	c. mesosphere	d. thermosphere
What is meant by	?		
<ol> <li>Atmospheric pressu</li> </ol>	ire. 2. H	ydrogen bond.	3. Fossils.
Choose the odd word	d out and write the so	ientific term for other	rs:
	Vater vapour - Freon -		
2. Quagga - Dodo biro	d - Dinosaur - Bald eag	gle.	
Question 3			
Put (√) or (x), then	correct the wrong on	es:	
1. Water has a neutral	effect on litmus soluti	on.	( )
<ol><li>Magnesium and por</li></ol>	tassium are kept under	the surface of kerosen	e. ( )
		the elevation of aeropla	nes from sea level. ( )
4. The archaeopteryx		ct elephants.	( )
<ol><li>Papyrus is consider</li></ol>	ed an extinct plant.		• ( )

المعاصرعلوم لغات (Workbook & Final Exams)/۲ع/تيرم ١ (١٢:٢)



Final Exams

Complete	the	foll	owing	sentences	:
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- 1. The nanometer equals ..... meter.
- 2. The ozone layer doesn't allow the passage of ...... ultraviolet rays.
- 3. ..... is non-flying and an extinct bird.
- 4. ..... predicated the ability of discovering new elements, so he left spaces in his table.

# Question 2

### $\bigcirc$ Put ( $\checkmark$ ) or ( $\times$ ) for each of the following statements :

- 1. There are fossils of complete insects kept in amber.
- 2. Sufficiency of plants on the Earth leads to the increase in temperature. ( )
- 3. The troposphere layer is the suitable layer for flying planes.
- 4. The angle between covalent bonds in water molecule is 100°.

### Write the balanced chemical equations for each of the following:

- 1. Dissolving of magnesium oxide in water.
- 2. Reaction of carbon dioxide with water.

### Question 3

#### Give reason for each of the following:

- 1. Oxygen gas evolves at the anode and hydrogen gas evolves at the cathode.
- 2. Occurrence of aurora phenomenon.
- 3. Sodium fires are not put off with water.
- 4. Water molecule is from polar compounds.

### B Study the following figure which represents a section of a periodic table, then answer:

A				(S)	9	I	-		
N				1		Z	В	J	1
X						L		K	D
	R	М							
E					Т				

- 1. Mention the atomic number of element (B).
- 2. What do shaded area represent?
- 3. Mention the symbol which represents:
  - a. The most active element in group (1A).
  - b. The element which has the largest atomic size in the second period.

# Question 4

- Write the scientific term:
  - 1. Tracess and remains of the old living organisms that are preserved in sedimentary rocks.
  - 2. An instrument used by pilots to measure the elevation from the sea level.
  - 3. They are safe areas established to protect endangered species in their homeland.
  - 4. The weight of air column of atmospheric air on a unit area.
  - A charged layer reflects radio waves.
  - 6. The most dangerous ozone pollutants known as freon.
- (B) Choose from column (B) what suits it in column (A):

(A)	(B)
<ol> <li>The process of converting the part of living organism to petrified material.</li> </ol>	a. fossil record b. petrification
<ol><li>The fossils which are in the rocks of different regions and indicate the extinction and evolution of organisms.</li></ol>	c. protectorates

# **El-Sharkia Governorate**

Directorate of Education

#### Answer the following questions:

# Question 1

- Complete the following sentences:
  - 1. Mendeleev arranged the elements ascendingly according to ......, while Moseley arranged them ascendingly according to ......
  - Elements of group (7A) are called .........
  - 3. The modern periodic table consists of ...... horizontal periods and ...... vertical groups.
  - 4. A bond that exists between water molecules is called ........
  - 5. Cl<sub>2</sub> + 2KBr ---- + .........
- Description Locate the position of the following elements in the modern periodic table:
  - 1. 19K
- 2. 13Al

3. 10Ne

- 4. 12Mg
- Calculate the height of a mountain if the temperature at its base is 30°C and at its top is (-9°C).

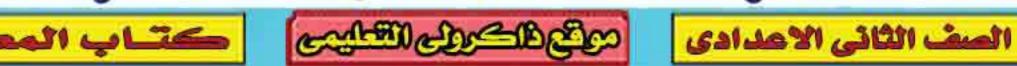
# Question (

- A Choose:
  - 1. The volume of oxygen gas evolving from water electrolysis equals ...... the hydrogen volume.
    - a. half
- b. double
- c. four times
- d. quarter

92

هذا العمل خاص بموقع ذاكرولي التعليمي ولا يسمح بتداوله على مواقع أخرى





Final Exams

All of the following gases are greenhouse gases except ........

a. CO,

b. O.

c. N<sub>2</sub>O

d. CH

3. Complete body fossils of insects are found preserved in ........

a. amber.

b. snow.

c. sedimentary rocks.

d. ocean.

4. ..... causes blindness.

a. Lead

b. Mercury

c. Sodium

d. Arsenic

#### Define:

- 1. Global warming phenomenon.
- Chemical activity series.
- Mention one example for each of the following:
  - 1. Extinct bird.

2. Most active metal.

Endangered bird.

# Question 3

- Correct the underlined words:
  - Archaeopteryx represents the link between reptiles and mammals.
  - 2. Meteors burn in thermosphere layer.
  - 3. Ultraviolet radiation has a thermal effect.
  - 4. Dinosaur is a mammal animal that has a shape midway between horse and zebra.
- Mention one use for each of the following:
  - 1. Liquefied nitrogen.

2. Silicon.

3. Cobalt 60.

- Give reasons for :
  - 1. Sodium is kept under the surface of kerosene.
  - The lower part of stratosphere is suitable for flying aeroplanes.

### Question

- Write the scientific term:
  - 1. A phenomenon that appears as brightly coloured light curtains seen from the both poles of the Earth.
  - Safe place that are specified to protect the endangered species in their homeland.
  - 3. The weight of air column of an atmosphere height on a unit area (1m2).
  - 4. The ability of the atom in the covalent molecule to attract the electrons of the chemical bond towards itself.
  - 5. The traces that indicate the remains of an old living organism after death.
  - Elements that have both properties of metals and nonmetals.
- Compare between :

Simple ecosystem and complicated ecosystem.

- Write the balanced chemical equation which expresses the reaction of :
  - 1. Carbon dioxide with water.
  - 2. Magnesium with dilute hydrochloric acid.

Final Exams

2. The coldest atmospheric l	laver is
------------------------------	----------

- a. troposphere.
- b. stratosphere.
- c. mesosphere.
- d. thermosphere.
- 3. Each period in the periodic table starts with a/an .........
  - a. metal.
- b. metalloid.
- c. non-metal.
- d. inert gas.
- 4. Complete body fossils of insects are found preserved in ......
  - a. ammonites.
- b. amber.
- c. igneous rocks.
- d. ambergris.

- 5. The snow crystal has ...... shape.
  - a. octagonal
- b. quadrilateral
- c. pentagonal
- d. hexagonal

### B What will happen when ...?

- 1. Storing water in plastic bottles.
- 2. Increasing the ratio of greenhouse gases in the atmosphere.

#### Mention one use of each of the following:

1. Liquefied nitrogen.

2. Aneroid.

### Question

### Correct the underlined words:

- 1. Nonmetal oxides are considered basic oxides.
- 2. Ozone layer is measured in a unit called picometer.
- 3. The nummulites fossil is used for indicating the age of sedimentary rocks.
- 4. Ibis bird is from the birds that can't fly because of its small wings.

### (B) Choose the odd word out, then mention what the rest has in common:

- 1. Lithium Cesium Sodium Magnesium.
- 2. Methane gas Carbon dioxide gas Oxygen gas Nitrous oxide.

### Arrange the following:

1. In a descending order according to electronegativity.

2. Fossils starting with first appearance on the life stage.

Mold fossil of fish - Mammoth fossil - Trilobite fossil - Archaeopteryx.

### Damietta Governorate

Damietta Educational Directorate

### Answer the following questions:

# Question 1

### Complete the following statements:

1. There are ...... bonds between water molecules, while the bonds between atoms in water molecules are ..... bonds.

# Question 4

- Give reasons for :
  - 1. Silicon slides are used in manufacturing of computers.
  - 2. Elements of the same group have similar properties.
  - 3. Water has high boiling point.
- (B) What is meant by ...?
  - 1. Van-Allen belts.
- 2. Chemical activity series.
- 3. Petrification.

- @ Correct the underlined words:
  - Ozone is the curved lines that join the points of equal pressure in atmospheric pressure maps.
  - 2. Quagga is the most famous extinct animal in the old times.
  - 3. Water has alkaline effect on litmus solution.

### 22 Kafr El-Sheikh Governorate

Science Director - General

#### Answer the following questions:

### Question 1

- **(A)** Complete the following statements:
  - 1. The modern periodic table consists of ...... horizontal periods and ...... vertical groups.
  - 2. Most of weather features occur in ....... layer, while satellites rotate in ...... layer.
  - 3. Archaeopteryx represents the link between ....... and .......
  - 4. Cl<sub>2</sub> + 2KBr ----- + ......
- B Explain the behaviour of the following elements with water:
  - 1. Iron.

2. Potassium.

# Question 2

- Choose the correct answer :
  - 1. Which of the following fossils plays an important role in petroleum exploration? ..........
    - a. Foraminifera and radiolaria.
- b. Nummulites.
- c. Foraminifera and trilobite.
- 2. The ...... is/are used in preservation of agricultural crops.
  - a. methyl bromide gas
- b. halons

c. nitrogen oxide

- 3. The hottest atmospheric layer is .........
  - a. troposphere.

- b. mesosphere.
- c. thermosphere.
- 4. The elements of group (7A) are known as .........
  - a. alkali metals.

- b. halogens.
- c. alkaline Earth metals.

- 5. There are ..... bonds among water molecules.
  - a. ionic

- b. hydrogen
- c. covalent

المعاصرعلوم لغات (Workbook & Final Exams) ٢٤ / تيرم ١ (١٠: ١١)



Final Exams

- 4. ..... and ...... are examples of some extinct species in the old times.
- 5. ..... is an instrument used to determine the possible day weather.
- 6. ..... is considered form safe places that has endangered species.
- (B) Mention the atomic number of the element that follows that element in :
  - 1. The same period.
  - 2. The same group.

# Question 2

#### Choose the correct answer :

- 1. The scientist who left gaps in his table to be filled with suitable discovered elements in future is ......
  - a. Moseley.
- b. Rutherford.
- c. Bohr.
- d. Mendeleev.

- is the hottest atmospheric layer. a. Stratosphere
  - b. Mesosphere
- c. Thermosphere
- d. Troposphere

- The snow crystal has ...... shape.
  - a. octagonal
- b. quadrilateral
- c. pentagonal
- d. hexagonal
- 4. ..... is an example of endangered living organisms.
  - a. Bald eagle
- b. Passenger pigeon
- c. Tasmanian cat
- d. Dinosaur

#### Mention the diseases which are causes by :

- 1. Mixing animals and human wastes with water.
- 2. Drinking water contains high concentration of mercury.

### Give one example for :

- 1. An element reacts instantly with water.
- 2. A plant is endangered.
- 3. An element is used in preservation of cornea of eye.

### Question

#### Write the scientific term:

- 1. Elements which have properties of metals and nonmetals.
- A group contains the strongest nonmetal.
- 3. It is a region in which the atmosphere envelope is inserted in outer space.
- 4. A bird is characterized by small wings and short legs.
- 5. They are traces and remains of old living organisms that are preserved in sedimentary rocks.
- 6. An atmospheric layer in which air currents move vertically.

#### B Give reasons for :

- 1. The lower part of stratosphere is suitable for flying airplanes.
- 2. Petrified wood are considered fossils although they look like rocks.

### @ Write the chemical equations represent each of the following:

- 1. Dissolving of magnesium oxide in water.
- 2. Reaction of chlorine with potassium bromide.

# Question 4

Look at the following diagram which represents a part of the modern periodic table, then answer:

N								20		z	В	J	
х										L		K	D
	R		М			1	1		94				
		S		10.	******					1000			
Е													

Write the letter (s) which represent (s):

1. Transition element.

2. The strongest metal.

3. The strongest nonmetal.

4. Noble gas.

- Define:
  - 1. Chemical activity series.

2. Extinction.

3. Electronegativity.

- 4. Atmospheric pressure.
- Calculate the height of a mountain if the temperature at its base is 20°C and at its top is (-6°C).

### Ismailia Governorate

Directorate of Education

Answer the following questions:

Question 9

- Complete the following:
  - 1. Mendeleev arranged the elements ascendingly according to ....., while Moseley arranged them ascendingly according to ......
  - 2. The highest temperature atmospheric layer is ......... and the least temperature one is .........
  - 3. Mg + 2HCl → ..... + .........
  - 4. Among the pollutants of the ozone layer are ...... compounds that are used in air conditioning sets and ...... compounds that are used in extinguishing fires.
- $\mathbb{O} C + O_2 \xrightarrow{\Delta} (A)$  $(A) + H_2O \longrightarrow (B)$ 
  - 1. Write the chemical formula of (A) and (B).
  - 2. Mention the effect of (B) on a litmus paper.

100

هذا العمل خاص بموقع ذاكرولى التعليمي ولا يسمح بتداوله على مواقع أخرى

# Question 2

- A Compare between (in a table):
  - 1. Simple ecosystem and complicated ecosystem. (according to: Number of members - Example)
  - 2. Troposphere and stratosphere layers. (according to : Height - Temperature at its top)
- What is meant by ... ?
  - 1. Fossils.
- Chemical activity series.
- 3. Electronegativity.

- C Study the opposite figure, then answer:
  - 1. Locate the position of element (B) in the modern periodic table.
  - 2. The figure represents group ...... which are named as .......
  - 3. What is the periodic number of the elements (C) and (D)?

# Question

- What happens when ...?
  - Melting of the snow of the two poles. 2. Overuse of methyl bromide.
  - 3. Drinking water with high concentration of mercury.
- B Write the scientific term:
  - 1. Safe areas established to protect endangered species in their homeland.
  - 2. Two magnetic belts help in scattering the harmful radiation away from the Earth.
  - 3. A solid halogen.
- Mention the importance of the following:
  - 1. Liquefied nitrogen.

2. Cobalt 60.

3. Altimeter.

- 4. Coral fossil.
- The street of the following is a street of the following:
  - 1. What's the name of this apparatus?
  - 2. Letter (X) on the figure represents ........
  - 3. Letter (Y) on the figure represents .........
  - 4. Write the symbolic balanced chemical equation.

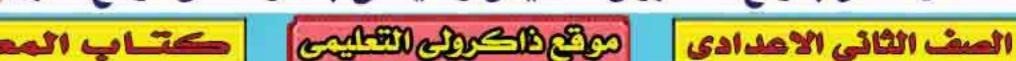
# Question •

#### Choose:

- 1. ...... fossils are found in limestone rocks of El-Mokattam mountain.
  - a. Ferns
- b. Radiolaria
- c. Nummulites
- d. Fish
- 2. All of the following are from semi-metals except .......
  - a. tellurium.
- b. silicon.
- c. boron.
- d. bromine.
- 3. The scientist ...... discovered the main energy levels of the atom.
  - a. Bohr
- b. Mendeleev
- c. Newton
- d. Moseley
- 4. All of the following are from greenhouse gases except ........
  - a. nitrogen oxide.
- b. CO,
- c. water vapour.
- d. nitrous oxide.

101

هذا العمل خاص بموقع ذاكرولي التعليمي ولا يسمح بتداوله على مواقع أخرى



# PART

- (B) Give reasons for :
  - 1. Water has high boiling point.
  - 2. Sodium and potassium are kept under kerosene surface.
  - 3. Ionosphere layer is important for radio stations.
- Calculate the temperature at the top of a mountain which its height is 5000 meters, if the temperature at the base of that mountain is 28°C.

# 25 Port-Said Governorate

Educational Directorate
Science Inspectorate for Language Schools

Answer the following questions:

# Question 1

- Complete the following statements:
  - 1. The modern periodic table consists of ...... horizontal periods.
  - 2. Archaeopteryx represents the link between ....... and .......
  - 3. Ultraviolet radiation has a ...... effect.
- Give reasons for the following:
  - 1. Water molecule is a polar molecule.
  - 2. The occurrence of the aurora phenomenon.
  - 3. Although sugar is a covalent compound, it dissolves in water.

### Question 2

- Write the scientific term for each of the following statements:
  - 1. A group contains the strongest nonmetals.
  - The environmental system that is affected severely by the absence of one species of living organisms that live in it.
  - 3. The vertical columns in Mendeleev's table.
- Calculate the height of a mountain if the temperature at its base is 30°C and at its top is -6°C.
- Mention one difference between each of the following:
  - Simple and complicated ecosystems.
  - 2. Natural and industrial water pollutants.

102

هذا العمل خاص بموقع ذاكرولى التعليمي ولا يسمح بتداوله على مواقع أخرى والصواقة

Final Exams

# Question 3

Choose from column (B) what suits it in column (A):

(A)	<b>(B)</b>	8
1. Altimeter	a. The layer that has all the weather phenomena.	
<ol><li>Thermosphere</li></ol>	b. A suitable layer for airplanes flying.	
<ol><li>Troposphere</li></ol>	c. A device used to measure the altitude of planes.	
<ol><li>Stratosphere</li></ol>	d. The hottest layer in the atmospheric envelope.	

- What happens in the following situations ...?
  - Putting a magnesium strip inside a test tube containing oxygen.
- Correct the underlined words:
  - 1. The passenger pigeon is from the birds that can't fly because of its small wings.
  - 2. Each period ends with a nonmetal.
  - 3. The environmental systems are safe places which are specified to protect the endangered species in their natural environments.

# Question 4

- Choose the correct answer:
  - 1. ..... is an example of microfossils.
    - a. Mammoth
- b. Ferns
- c. Foraminifera
- d. Archaeopteryx
- 2. The scientist ...... discovered the main energy levels in the atom.
  - a. Bohr
- b. Mendeleev
- c. Moseley
- d. Hofmann
- 3. All of the following are endangered species except .........
  - a. panda bear.
- b. bald eagle.
- c. quagga.
- d. rhinoceros.

- 4. Sodium oxide is from ..... oxides.
  - a. amphoteric
- b. acidic
- c. nonmetallic
- d. basic
- The opposite figure shows a person in a car with closed windows:
  - 1. Label the letters (A) & (B) that represent two types of electromagnetic waves.
  - 2. What is the process expressed by this figure?
- Define each of the following:
  - Chemical activity series.
  - 2. Fossils.

3. Water pollution.

103

هذا العمل خاص بموقع ذاكرولى التعليمي ولا يسمح بتداوله على مواقع أخرى الصف الثاني الاحدادي صحيحات المحاددي المحادي المحاددي المحا





104

هذا العمل خاص بموقع ذاكرولي التعليمي ولا يسمح بتداوله على مواقع

### Study the opposite figure, then answer:

What is the symbol (s) which indicate (s) the:

- 1. Inert gases.
- 2. Alkali metals.
- 3. Halogens.

										N
Α						58	1	K	L	
	С					Н				0
В		D	E	F	G		J		М	

# Question 3

- What happens when ... ?
  - Adding the purple Sunflower solution to a jar has a piece of burning coal. [Write the symbolic balanced equation].
- Correct the underlined words:
  - 1. The elements in Mendeleev's table are arranged according to the increase of atomic numbers.
  - 2. The radioactive cobalt is used in preservation of cornea of the eye.
  - 3. Element which its atomic number is 12 lies in period four and group (2A).
  - 4. Fluroine gas is used as an insecticide to preserve stored agricultural crops.
  - 5. Nobel gases are elements which have both properties of metals and nonmetals.
- Ouring the electrolysis of acidified water, the volume of the gas which increases the glowing of burning fragment when approaching is equal to 7 cm<sup>3</sup>:
  - 1. What is the name of this apparatus in the process of electrolysis?
  - 2. What is the gas name? and it evolves at ...... pole.
  - 3. Write the balanced symbolic equation of this reaction.

### Question 4

- Mrite the symbolic balanced chemical equations that indicate the following reactions:
  - 1. Magnesium with hydrochloric acid.
  - 2. Chlorine gas with potassium bromide solution.
- B What do you expect when ... ?
  - 1. Absence of one of its species from the simple ecosystem.
  - 2. Establishing natural protectorate.
- If the temperature at the base of Mountain Everest is 20°C. How much is the temperature at its top if the mountain height is 8 km.
- What is meant by ... ?
  - 1. Extinction.

2. Global warming phenomenon.

105 المعاصرعلوم لغات (Workbook & Final Exams)/۲ع/تيرم ١ (١٤: ١)

ذا العمل خاص بموقع ذاكرولى التعليمي ولا يسمح بتداوله على مواقع أخرى والمعلق

هذا العمل خاص بموقع ذاكرولى التعليمي ولا يسمح بتداوله على مواقع أخرى الصف الثاني الاعدادي صحيحاكي التعدادي المحادي المحادي

Workbook

Final Exams

	THOU EXAMI
3 in its salt solutions.	
a. Chlorine replaces bromine	b. Bromine replaces fluorine
c. Iodine replaces chlorine	d. Iodine replaces fluorine
4. After solidification of the resinous management of the resinous manageme	atter secreted by pine trees in the old geological
a. amber fossil.	b. fossil of a complete body.
c. trilobite fossil.	d. nummulites fossil.
5 is the second layer of atmosph	eric envelope.
a. Troposphere	b. Stratosphere
c. Mesosphere	d. Thermosphere
6 is used as an insecticide to pre-	serve stored agricultural crops.
a. Methyl bromide gas	b. Halons
c. Nitrogen oxide	d. Freon
7. Worm's tunnels fossil is formed beca	use of
a. the presence of hard skeleton.	

- b. the activity of worms during its life.
- c. the death of the worms themselves and quickly buried in sedimentary rocks.
- 8. ..... protectorate is the first established natural protectorate in Egypt.
  - a. Saint Cathrine
- b. Ras Mohamed
- c. Wadi Hetan
- d. Petrified forest
- (B) Mention one use of each of the following elements:
  - 1. Cobalt 60.

2. Liquefied nitrogen.

# Question 4

- Write the scientific term:
  - The block that contains the series of lanthanides and actinides.
  - A charged layer reflects radio waves.
  - 3. Thinning or losing parts of ozone layer above the south pole.
  - 4. Fossils of organisms that had lived for a short period of time in the past and had a wide geographic distribution.
- Mention one difference between each of the following:
  - 1. Complicated ecosystem and simple ecosystem.
  - 2. The benefits (or characteristics) of Ras Mohamed protectorate and Wadi Hetan region.
- Write the balanced chemical equation which expresses the following reaction: Carbon dioxide with water.

107

# **El-Minia Governorate**

Administration of Distinguished and Governmental Language Schools

### Answer the following questions:

Question 1

### Complete the following statements:

- 1. Fossils are found in ..... rocks.
- is the region between stratosphere and mesosphere.
- 3. Metal oxides are called ...... oxides, while nonmetal oxides are called ..... oxides.
- 4. Ultraviolet radiations have ...... effect, while the infrared radiations have ...... effect.
- 5. The scientist ...... discovered the main energy levels in the atom, but the scientist Rutherford discovered ......

### Write the balanced chemical equations:

- 1. The formation of ozone gas.
- 2. Reaction between chlorine gas and potassium bromide.

# Question 2

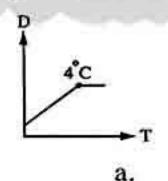
### Choose the correct answer:

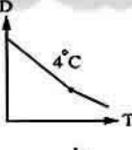
- 1. The element which locates in period (3) and group (3A) is ........
  - a. 13Al

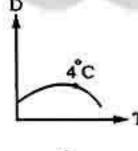
b. 5B

- c. , Na
- 2. All of the following gases are greenhouse gases except ......
  - a. CO,

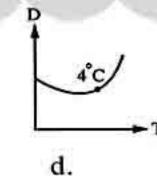
- b. N<sub>2</sub>O
- c. 0,
- d. CH,
- 3. The figure ...... represents the change of water density by changing the temperature.







c.



- 4. The air moves ..... in the stratosphere layer.
  - a. horizontally
- b. vertically
- c. inclined
- d. no correct answer
- 5. Complete body fossils of insects are found preserved in .......
  - a. ammonites.
- b. amber.
- c. igneous rocks.
- d. scorpion.

### B Give reasons for :

- 1. Water molecules are from polar compounds.
- 2. The atomic size increases through group.

108

Workbook

Final Exams

# Question 3

- Write the scientific term for each of the following statements:
  - 1. Curved lines that join the points of equal pressure in the atmospheric pressure maps.
  - 2. The halogen which exists in a solid state.
  - 3. Thinning or losing parts of ozone layer.
  - Elements that have properties of metals and nonmetals.
  - 5. A type of ultraviolet radiations that is absorbed completely 100 % in ozone layer.
  - 6. Arrangement of metals in a descending order according to their chemical activity.

### Problem :

If the temperature at the top of a mountain is 17°C.

Calculate the temperature at its base if the mountain height is 2000 m.

# Question (

- Correct the underlined words:
  - 1.50% of the mass of the atmospheric envelope is present in the area between the sea level and 13 km elevation.
  - 2. Cobalt 60 is used in preservation of cornea of the eye.
  - 3. Elements of "p" block are organized in 5 groups.
  - Chemical pollution of water causes typhoid and hepatitis.
  - 5. Extinction of some polar animals is from the positive effects of global warming phenomenon.
- What happens when adding HCl to the following elements ...?
  - 1. Copper. (Write the chemical equation).
  - 2. Magnesium.

# **Assiut Governorate**

Administration of Distinguished and Governmental Language Schools

### Answer the following questions:



- Complete the following statements:
  - 1. Drinking water has high ratio of ...... which causes the death of brain cells.
  - 2. The atmospheric layer containing most of the water vapour is .........
  - 3. The number of electrons in the outermost energy level indicates ...... number.
  - 4. There are ...... bonds between water molecules, while the bonds between atoms in water molecules are ..... bonds.

109

# PART

- Write the measuring unit of:
  - 1. The wavelength of ultraviolet rays.
  - 2. Atmospheric pressure.
- C Locate the position of the following elements in the modern periodic table :

1. 13Al

2. 10 Ne

# Question 2

- Choose the correct answer:
  - The element which its atomic number equals 17 is similar to that of atomic number equals .......

a. 7

b. 19

c. 9

d. no correct answer.

- 2. Elements in d-block are called ......
  - a. alkaline Earth metals.

b. halogens.

c. transition elements.

d. alkali metals.

- 3. The coldest layer in the atmosphere is .......
  - a. mesosphere.

b. stratosphere.

c. ionosphere.

d. thermosphere.

4. Complete body fossils of insects are found preserved in ........

a. amber.

b. ambergris.

c. igneous rocks.

d. no correct answer.

### (B) State using equations:

- How to obtain H<sub>2</sub> by using three different methods.
- Mention the importance of :

1. Van-Allen belts.

2. Cobalt 60

# Question 3

- Correct the underlined words:
  - 1. Elements of group (1A) are known as inert gases.
  - 2. Each period ends with a nonmetal.
  - 3. Archaeopteryx links between reptiles and mammals.
  - 4. The halons are produced from burning supersonic airplanes.
- (B) Compare between:
  - 1. Fluorine and cesium [according to chemical activity].
  - 2. Near ultraviolet rays and far ultraviolet rays [according to wavelength].
- Write the balanced chemical equations which express the reaction of :

1. Carbon dioxide with water.

2. Halogen with metallic element.

110

هذا العمل خاص بموقع ذاكرولي التعليمي ولا يسمح بتداوله على مواقع أخرى والمعلوم





الصف الثائي الاعدادي

Workbook

Final Exams

# Question 4

- Write the scientific term:
  - 1. The apparatus which is used for electrolysis of water.
  - The scientist who discovered the presence of protons in the nucleus of the atom.
  - 3. The series in which metals are arranged in a descending order according to their chemical activity.
  - Non-flying bird which became extinct.
- (B) Give reasons for:
  - 1. Mendeleev left empty places in his table.
  - Ionospherer layer is important for wireless communications.
- Calculate the temperature at the top of a mountain with a height 8000 m if the temperature at Earth's surface equals 22°C.

# Sohag Governorate

Science Department

Answer the following questions:

# Question (

- Complete the following statements:
  - 1. Ultraviolet radiation has ...... effect, while infrared radiation has ...... effect.
  - 2. The highest temperature layer in the atmosphere is ......... and the least temperature is .........
  - 3. Archaeopteryx fossil links between ....... and ......
  - 4. Desert is an example of ...... ecosystem, while tropical forest is an example of ...... ecosystem.
- B Give one use for:
  - 1. Aneroid.

Liquid sodium.

- 3. Index fossils.
- Calculate the height of a mountain if the temperature at its base is 30°C and at its top is (-9°C).

# Question 2

- Give reasons of the following:
  - 1. Increase CO, gas ratio in the atmosphere.
  - 2. Water molecule is from polar molecules.
  - Elements of group (1A) are known alkali metals.
- 4. The lower part of the stratosphere is suitable for flying airplanes.
- B Locate the position of the following elements in the modern periodic table:

1. 20Ca

2. 3Li

3. <sub>8</sub>O

هذا العمل خاص بموقع ذاكرولي التعليمي ولا يسمح بتداوله على مواقع أخرى

### Compare between:

- 1. Mendeleev's periodic table and Moseley's periodic table [according to the arrangement of the elements].
- Acidic oxides and basic oxides [according to dissolving in water].

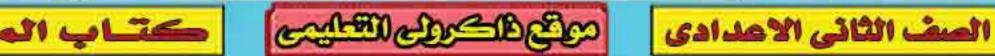
### Find the atomic number for the following elements:

- 1. Element X lies in third period and group (6A).
- Element Y lies in the fourth period and group (2A).

112

هذا العمل خاص بموقع ذاكرولي التعليمي ولا يسمح بتداوله على مواقع أخرى





# 1

#### **Cairo Governorate**

Heliopolis Educational Zone St. Joseph's School

#### Answer the following questions:



- Complete the following statements:
  - 1..... rearranged the elements in an ascending order according to their atomic number.
  - 2. Arrangement of metals according to their chemical activity is called ..........
- B State four different factors that cause the recent extinction of species:
- @ Give reasons for each of the following:
  - 1. When the concentration of green house gases increases in the atmosphere, then the Earth's temperature increases also.
  - 2. Dodo bird is a non-flying bird.

### Question 2

- **A** Choose the correct answer:
  - 1. All the following are alkaline Earth metals except .........
    - a. magnesium.
- b. potassium.
- c. calcium.
- d. beryllium.

- 2. ..... is the second atmospheric layer.
  - a. Mesosphere
- b. Stratosphere
- c. Troposphere
- d. Thermosphere

B Complete the following equations:

- Define each of the following:
  - 1. Ionization.
- 2. Fossil.

### Question 3

- Mrite down the scientific term of the following:
  - 1. The first vertebrate to appear.
  - 2. Fossils of organisms that lived a short period of time in the past and became extinct.
- Arrange each of the following in its proper group and period :
  - 1. <sub>13</sub>Ål
- 2. <sub>17</sub>Cl
- 3. <sub>19</sub>K

4. <sub>3</sub>Li



C Explain	each	of the	following	
-----------	------	--------	-----------	--

- 1. The temperature of human body does not change by changing the atmospheric temperature.
- 2. Disappearance of papyrus plant.

#### A Put $(\checkmark)$ or (x) in front of each statement :

- 1. Liquefied nitrogen is used in preservation of the eye's cornea.
- 2. The Tasmanian cat has a pouch like the Kangaroo.

#### B What is meant by each of the following ...?

1. Electronegativity property.

- 2. Metalloids.
- Mention Four dangerous pollutants of the ozone layer.

2 Cairo Governorate

Heliopolis Educational Zone Patriarchal College (Ex. Frères)

#### Answer the following questions:

Question 1

#### **A** Complete the following statements:

- 1. By increasing the atomic size in the group, the electronegativity ....... and the atomic number .........
- 2. Fossils are ....... of old living organisms that are preserved in ...... rocks.
- 3. There are ...... bonds between water molecules, while the bonds between atoms in water molecule are ...... bonds.
- 4. The number of electrons in the outer most energy level indicates ...... number.

#### B Give reasons for each of the following:

- 1. Ionosphere is important for wireless communication.
- 2. Mendleev left gabs in his table.
- 3. The bald eagle is one of the endangered species.

#### (a) Locate in the modern table the position of the following elements:

1. <sub>13</sub>Al

- 2. <sub>10</sub>Ne
- 3. <sub>11</sub>Na

A	Choose	the	correct	answer	
---	--------	-----	---------	--------	--

1	Elements	c	11 1	11 111	•	11 1	
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- a. lanthanides. b. n
  - b, noble gases.
- c. transition elements. d. actinides.
- 2. ..... is located between stratosphere and mesosphere.
  - a. Tropopause
- b. Stratopause
- c. Mesopause
- d. Ionosphere
- 3. When sodium reacts with water ...... gas evolves.
  - $a.O_2$
- b.CO<sub>2</sub>
- $c.H_2$

 $d.N_2$ 

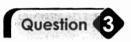
- 4. ..... is considered from halogens.
  - a. Sodium
- b. Chlorine
- c. Helium
- d. Calcium

#### **B** Compare between:

- 1. Fluorine Cesium, according to:
  - a. electronegativity.

- b. chemical activity.
- 2. Near ultraviolet rays Far ultraviolet rays, according to:
  - a. wavelength.

- b. their effects on living organisms.
- Calculate the temperature at the top of an mountain with height 8000 m. if the temperature at Earth's surface = 22°C.



#### Mrite the scientific term:

- 1. It is the replica of the external details of a skeleton of once and old living organsim.
- 2. It is characterized by containing a large number of members of living organisms.
- 3. It is the continuous increase in the average temperature of Earth's near surface air.
- 4. It is a phenomenon that appears as bright coloured light curtains seen from the both poles of the Earth.
- 5. It is the number of protons inside the nuclus of the atom of an element.
- 6. It is an atom of nonmetallic element that gains an electron or more during the chemical reaction.

#### B Mention an example of :

1. Simple ecosystem.

- 2. Polar compound.
- 3. Gas causes ozone erosion.
- 4. The most active element in the periodic table.

#### Mention one use of:

- 1. Beaking soda powder.
- 3. Aneroid.

- 2. Hofmann's Voltameter.
- **4.** Sodium in liquid state.

### Question 4

#### Write the chemical equation which represent the following reactions:

1. Water electrolysis.

- 2. Magnesium with hydrochloric acid.
- 3. Bromine with potassium iodile.
- 4. Copper with hydrochloric acid.

#### **B** Write the measuring unit of:

1. Atomic size element.

- 2. Atmospheric pressure.
- 3. The degree of ozone layer.
- 4. The wavelength of ultraviolet rays.

#### Mention:

- 1. Kinds of artificial water pollution.
- 2. The negative effects of global warming phenomenon.

### 3 Cairo Governorate

Heliopolis Educational Admin. St. Fatima Language School Abbassia

#### Answer the following questions:

### Question 1

#### Complete the following statements:

- 1. Among the pollutants of ozone layer are ...... that are used in extinguishing fires, and ...... that is used as insecticides to preserve stored crops.
- 2. Ultraviolet rays have ...... effect, while infrared rays have ..... effect.
- 3. Drinking water has high ratio of ...... causes death of brain cells.
- 4. From metals that reacts with hot water vapour only is ........

#### B Choose from column (B) what suits in column (A):

(A)	(B)
1. Methane gas	a. N <sub>2</sub> O
2. Carbonic acid	b. CFC <sub>s</sub>
3. Nitrous oxide	c.H <sub>2</sub> CO <sub>3</sub>
4. Chlorofluorocarbon	d. CH <sub>4</sub>

- Study the opposite figure which represents a section of the periodic table, then answer:
  - 1. What is the symbols which indicates the:
    - a. Inert gases.
    - b. Alkali metals.
    - c. Halogens.
    - d. Alkaline earth metal.

												IN
A									I	K	L	
	C							Н				O
В			D		E	F	G		J		M	

2. Compare between (K, L, I and A) according to atomic size and electronegativity in descending order.

### Question 2

- **A** The opposite figure represents the Van-Allen magnetic belts :
  - 1. Where are they located?
  - 2. What is the phenomenon that results from their existence?
  - 3. Why they are very important for Earth planet?



- B Write a short note about:
  - 1. Factors causing extinction of species.
- 2. Chemical activity series.

3. Petrified fossils.

- 4. Electronegativity.
- Find the height of a mountain if the temperature at its base is 40°C and at its top is 7.5°C.



- A Give reasons for each of the following:
  - 1. Water has a neutral effect on both litmus paper.
  - 2. Earth's temperature is organized by troposphere layer.
  - 3. Sugar dissolves in water.
- B Choose the odd word out, then mention the scientific term for the rest:
  - 1. Potassium Iodine Fluorine Astatine Bromine.
  - 2. Fluorine Chlorine Oxygen Hydrogen Sodium.
  - 3. Lithium Sodium Calcium Caesium.
- 1. Write one example for :
  - 1. Natural water pollutant.

2. Liquid halogen.



#### 2. Choose the correct answer:

- 1. The hottest atmospheric layer is .......
  - a. troposphere.
- b. stratosphere.
- c. mesosphere.
- d. thermosphere.
- 2. The element which its atomic number = 17 is similar to that of atomic number equals .......
  - a. 2

b. 7

c. 9

d. 19

### Question 4

#### A Compare between each of the following:

- 1. Mendeleev's table and the modern periodic table according to: (the principle of elements classification)
- 2. Electrolysis of water and ionization of water according to:

  (The chemical equations only)
- 3. Troposphere and stratosphere according to: (Air movement)

#### B Write the balanced chemical equation for the following reactions:

- 1. Reaction of sodium with water.
- 2. Reaction of Magnesium with dilute hydrochloric acid.
- 3. Reaction of carbon dioxide with water.
- 4. Two steps of ozone formation from oxygen by UV.

# 4

#### **Cairo Governorate**

El Nozha Zone Our Lady of Perpetual Succour School

#### Answer the following questions:



#### A Choose the correct answer:

- 1. From the recently extinct species .........
  - a. dodo.
- b. archeopytryx.
- c. papyrus.
- d. all the previous.
- 2. The number of periods in the modern periodic table .........
  - a. 18
- b. 7

c. 8

d. 10

- 3. Elements in d block are ......
  - a. alkali metals.

b. alkaline earth metals.

c. transition elements.

d. inert gases.

4	The coldest	1	•	41		•	
4	The coldest	iaver	ın	tne	armosphere	15	
	I IIC COIGCSt	iu, ci	***	$u_1v_2$	attitoopitoto	10	

- a. troposphere.
- b. mesosphere.
- c. stratosphere.
- d. ionosphere.
- 5. The normal atmospheric pressure at sea level is ...... millibar.
  - a. 10.13

- c. 1013.25
- d. 76

#### 6. Air moves horizontal in ......

- a. troposphere.
- b. mesosphere.
- c. stratosphere.
- d. thermosphere.

#### B Give an example on :

1. Metalloid.

2. Substance has bad effect on ozone layer.

3. Acidic oxide.

4. Water pollutant causes damage of brain cells.

#### What happens if .....?

- 1. Decrease in green-house gases.
- 2. Extinction of an organism in simple ecosystem.
- 3. Cutting oak trees in north America.

### Question 2

#### A Put $(\checkmark)$ or (x) in front of each statements :

1. Methyl bromide is used as fire extinguish	
I Mathul bromide is liced as tire extinguist	LOT
T. MICHIVI DIDIHIUC IS USCU AS THE CAHIBIISI	ICI.
1. 1. 10 this is about as the changaist	

(	)	
•	,	

2. Concord planes are useful for the environment.

- 3. Presence of Nummulite fossil indicates that the environment was tropical forest.

4. Far and medium UV help the body to increase the immunity.

5. It is healthy to keep tap water in plastic bottles.

#### **B** What is the scientific explanation?

- 1. Presence of Foraminefra and Radiolaria in a place.
- 2. Increase in atomic size with the increase in atomic number in the group.
- 3. Aeroplanes fly in the tropopause or the lower part of the stratosphere.

#### C Answer the following :

- 1. Which has higher polarity  $H_2O$  or HCl? (H: 2.1-0:3.5-Cl:3)
- 2. An element present in group 13, period 2, find its atomic number, and find the atomic number of the element below it in the periodic table.



Write the scientific term	:
---------------------------	---

- 1. Safe area to keep endangered species in their homeland.
- 2. The weight of air column equal to the height of atmosphere and surface area 1cm.
- 3. Traces and remains of old organisms preserved in sedimentary rocks.
- 4. Elements in group 7A.

#### **B** Compare between:

1. Mold and trace.

2. Group 1 and group 2

#### Write short notes about :

- 1. Mammoth.
- 2. Halons.
- 3. Van-Allen belts.

### Question 4

#### **A** Complete the following statements:

- 1. Water is used to extinguish fires, because it has low ........
- 2. The unit used to measure atomic size is .......
- 3. The atmospheric layer containing most of the water vapour is .........
- 4. Cobalt 60 produces ...... rays, so it is used in food preservation.
- 5. Cl<sub>2</sub> + 2KBr + ...... + ......

#### B Give reasons for each of the following:

- 1. Extinction of Dinosaurs.
- 2. Mendeleev left gaps in his periodic table.
- 3. Cutting trees has bad effect on the environment.
- 4. Moving up decreases the atmospheric pressure.
- Find: the temperature outside an aeroplane at height 11 km, if the temperature at the Earth's surface is 24°C.

### 5

#### **Cairo Governorate**

#### Abdeen Educational Directorate Patriarchal College

#### Answer the following questions:

	_					_	
4	A	QK	100		8.7		_
	1.5	25.1	_1.		Sec. 1		
	100	ue	STI		1		-
	200				100	ш	
			4,444.0	100		•	,

Comn	lata	tha	following	statements	,
Comp	nete	tne	TOHOWING	a statements	

- 1. The highest temperature layer in the atmosphere is ......... and the least one is .........
- 3. All alkalis dissolve in water forming ....... , but not all ...... are alkalis.
- 4. ..... gas results from combining of free active ...... with the molecule of the same gas.
- 5. Halogens are named by this name because they react with ...... forming ..........

#### B State using equations:

- 1. How to obtain H<sub>2</sub> using 3 different methods.
- 2. The role of CFCl<sub>3</sub> in destroying the ozone.
- 3. The reaction of dil. HCl with Mg and with Ca.

#### What do you know about ...?

- 1. Structure of water molecule with drawing.
- 2. Formation of complete body fossils (giving examples).

### Question 2

#### A Give reasons for each of the following:

- 1. Petrified woods are considered from fossils although they look like rocks.
- 2. Potassium is more active than sodium in group 1A.
- 3. Formation of ozone layer in the stratosphere layer.
- 4. Although sugar is a covalent compound, it dissolves in water.

#### B Choose the correct answer:

- 1. All the following elements are from semi-metals except ........
  - a. telerium.
- b. silicon.
- c. boron.
- d. bromine.

- 2. One Dobson unit (DU) is defined as .........
  - a. 3 mm.
- b. 0.1 mm.
- c. 0.01 mm.
- d. no correct answer.



3. The density of air at the foot of a mountain is ...... its top.

a. more than

b. less than

c. equal to

d. doubled

4. Al<sub>2</sub>O<sub>3</sub> is considered as ..... oxide.

a. basic

b. acidic

c. amphoteric

d. alkaline

#### What do these numbers indicate?

 $1.1 \times 10^{-9}$  m.

2.37 km.

### Question 3

#### Mrite the scientific term:

- 1. The best world heritage place where whale's skeletons and complete whale's fossils.
- 2. Oxides that cause ozone hole and result from burning the fuel of ultrasound air planes.
- 3. Different forms of nuclei of the same element having the same atomic number but different mass number.
- 4. The continuous increase in the average temperature of the air near the surface of the Earth.

#### **B** Compare between:

- 1. Passenger pigeon and rhinoceros.
- 2. 68 species, 138 species and 450 species.
- 3. Van Allen belts and Aurora phenomenon.
- Some scientists believe that we live the sixth extinction age where the rate of extinction is 40 times larger than the normal rate of extinction.

Explain the reasons that cause this extinction.

### Question 4

#### A Correct without changing the underlined phrases:

- 1. The red list issued by IUCN includes the extinct species.
- 2. The temperature of the third layer increases at a high rate as we go up until it reaches 1200°C.
- 3. Burning a piece of magnesium gives magnesium oxide which is an acidic oxide.

#### B State one use:

1. Exosphere region.

2. Index fossil.

3. Liquid nitrogen.

Barometer.

#### What happens when .....?

- 1. Removing snakes from a terrestrial food chain.
- 2. Infrared radiations don't reemit back from troposphere layer.
- 3. Dissolving of magnesium oxide in water.

### 6

### Cairo Governorate

Shoubra Educational Directorate Ramses Language School

#### Answer the following questions:



#### A Choose the correct answer:

- 1. Alkaline earth metals lie in group ......
  - a. 1A
- b. 2A
- c. 7 A

d. zero

- 2. Meteors are burned in ...... layer.
  - a. mesosphere
- b. troposphere
- c. stratosphere
- d. thermosphere
- 3. When sodium reacts with water, ...... gas evolves.
  - a. O<sub>2</sub>
- b. CO<sub>2</sub>
- c. H<sub>2</sub>

- d. Br<sub>2</sub>
- 4. Element (x) lies in the third period and group (3A), its atomic number is ..........
  - a 7

- b. 17
- c. 13

- d. 18
- 5. Each period in the modern periodic table starts with ........
  - a. nonmetal.
- b. metal.
- c. metalloid.
- d. inert gas.
- 6. Ozone molecule is formed of ...... oxygen atom (s).
  - a 1

- b. 2
- c. 3

- d. 4
- 7. ..... is the plant that grows in the upper Nile swamps.
  - a. Beech
- b. Oak
- c. Camphor
- d. Papyrus

#### **B** Give reasons for each of the following:

- 1. Water molecule is from polar compounds.
- 2. Using radioactive cobalt in food preservation.
- 3. The dodo bird is an easy target to hunt.

### Question 2

#### Mrite the scientific term:

- 1. The weight of air column of atmospheric air on unit area.
- 2. Arrangement of metals in a descending order according to their chemical activity.



- 3. Continuous increase of the average temperature of air near Earth's surface.
- 4. An instrument used by pilots to measure the elevation from the sea level.
- 5. Elements which start to appear in the fourth period.
- 6. An endangered animal that lives in the bamboo forests of northeast china.
- B Write the balanced chemical equation which represents the following:
  - 1. Water electrolysis.
  - 2. Reaction of Magnesium with hydrochloric acid.
- **(C)** What is the importance of :
  - 1. Sodium.

2. Liquified nitrogen.

### Question (3)

- A Complete the following:
  - 1. Most weather features occur in ....... layer, while satellites swim through .........
  - 2. Pure water boils at ...... and freezes at ...........
  - 3. Archeopterayx links at between ....... and .........
  - 4. Pine trees secrete resinous matter which changes into ........ after its solidification.
- B Locate the position of each of the following elements in the modern periodic table.
  - 1. 20Ca

- 2. <sub>10</sub>Ne
- 3. <sub>17</sub>Cl

### Question 4

- A Put  $(\checkmark)$  or (x) then correct the wrong ones :
  - 1. The ionosphere is surrounded by two magnetic belts known as Van Allene's belt. ( )
  - 2. The atomic number of an element increases from an element to the next element in the period by one.
  - 3. Ammonia and water are from polar compounds. ( )
  - 4. The scientist Mendeleev discovered the main energy levels in the atom. ( )
  - 5. Golden frog is considered endangered animal. ( )
  - 6. Petrified wood is considered from rocks.
- **B** If the temperature at the base of a mountain is 20.5°C. Calculate the temperature at its top if the mountain's height is 9 km.
- C Compare between:
  - 1. Group (1A) and group (7A).

- [kind of formed ions].
- 2. Metal oxides and nonmetal oxides.
- [the effect of each on litmus paper]

)

### 7

### **Cairo Governorate**

#### West Cairo Zone

#### Answer the following questions:

		-			_
45	200	250750	20,000	W. Control	2
28	O	ue	stic	nc	
15	<b>Outs</b>	to Great	estate)	of later 64	<b>a</b>

#### **A** Complete the following statements:

- 1. From the extinct animals in the old ages are ....... and ...........
- 2. Archaeopteryx is a link between ....... and .........
- 3. ..... and ..... are from pollutants of ozone layer.
- 4. The highest temperature layer in atmosphere is .......... and the least temperature one is ..........
- 5. The valency of alkali metal elements is .......
- 6. The electronegativity in the modern periodic table increase from ...... to ....... inside the same period.

#### **B** Give reasons for each of the following:

- 1. Elements of the same group have similar properties.
- 2. Water molecule is from polar molecules.
- 3. Pilots prefer to fly their planes in the lower part of stratosphere.
- 4. Sodium and potassium are kept under kerosene.

### Question 2

#### Write the scientific term :

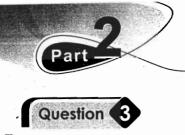
- 1. The continuous decrease in the number of the same species of a living organism without compensation, until they all die out.
- 2. Traces and remaining of old living organisms that are preserved in sedimentary rocks.
- 3. The region between mesosphere and the thermosphere.
- 4. The bond exists between water molecules.
- 5. Elements that have properties of metals and nonmetals.

#### What happens if ...?

- 1. Adding the violet litmus solution to magnesium oxide.
- 2. Storing tap water in a plastic bottle.

#### C Locate the position of the following elements in the modern periodic table:

- 1. Calcium 20 Ca
- 2. Neon <sub>10</sub>Ne
- 3. Helium <sub>2</sub>He



$lack A$ Put ( $\checkmark$ ) or ( $\swarrow$ ) ,the	n correct the wrong	ones:		
1. Halogens are mon	oatomic molecules.			. (
2. Quagga is from th	e endangered species	•		(
3. Bohr had discover	red the main energy le	evel.		(
4. Metallic property	in group 1A increases	s from up to down.		(
5. The ozone layer a	llows the passage of a	all near <b>and me</b> dium u	ltraviolet rays.	,(
6. Stratopause separa	ates between stratospl	nere and troposphere.		(
B Calculate the temperature at its foot is 32°C.	erature at the top of	mountain of height	4 km. If the tempe	erature
Write the chemical voltameter.	equation representir	g the water electroly	sis by hofmann's	
Question 4				
A What is meant by	?			
1. Chemical activity	series.	2. Atmospheric pre	essure.	
<b>B</b> Choose the correct	answer :			
1 is the first of	establishe natural prot	tectorate in Egypt.		
a. Saint cathrine	b. Ras Mohamed	c. Wadi Hetan	d. Petrified for	est
2. Ozone molecule	consists of ator	ns.		
a. four oxygen	b. two oxygen	c. three oxygen	d. one oxygen	
3. Ionosphere layer	is surrounded by two	belts.		
a. electric	b. magnetic	c. thermal	d. ionic	
4. The snow crystals	s have shape.	•	, <del>, , , , , , , , , , , , , , , , , , </del>	•
a. octagonal	b. quadrilateral	c. pentagonal	d. hexagonal	
5 is an examp	ple of microfossils.			
a. Mammoth	b. Ferns	$_{\text{C}}$ . For a minifer a	d. Archeoptrer	yx
6. The strongest met	als lie in group			
a. 7 A	b. 2 A	c. 1 <b>A</b>	d zero	



#### Giza Governorate

#### Boulak El Dakrour Directorate.

#### Answer the following questions:



#### **A** Complete the following statements :

- 1. The atomic size of the same group increases by ...... the atomic number.
- 2. The hottest layer in the atmosphere is ......., and the coldest one is ........
- 4. ..... discover the main energy levels in the atom.

#### **B** Give reasons for each of the following:

- 1. The polarity of water molecule more than the polarity of ammonia.
- 2. Stopping the manufacturing of concord aeroplanes.
- 3. Alkali metals are kept under kerosene.
- 4. Petrified woods are considered fossils although they look like rocks.

### Question 2

#### Mrite the scientific term:

- 1. The safe area established to protect endangered species in their homeland.
- 2. The scientist who discovered the presence of protons in the nucleus.
- 3. Elements that have the properties of metals and nonmetals.
- 4. An apparatus used to measured the altitude from Earth's surface.

#### **B** Compare between:

1. Troposphere and stratosphere.

(Two points only)

2. Metal oxides and nonmetal oxides. (Solubility in water and it's effect on litmus paper)

### Question 3

#### **A** Choose the correct answer:

- 1. An element of four energy levels and it's outer most energy levels contains two electrons, it's atomic number is .........
  - a. 16
- b. 12
- c. 18

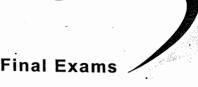
- d. 20
- 2. The sum of protons and neutrons of the element  ${}_{3}X^{7}$  is .........
  - à. 10
- b. 6

c. 7

d.4



3. When sodium re-	act with water	gas evolve.		
a. CO <sub>2</sub>	b. H <sub>2</sub>	c.Cl <sub>2</sub>	$d.N_2$	
4. All of the follow	ing are natural disast	ers that threaten living	organizing excep	t
a. floods.	b. volcanoes.	c. drought waves.	d. global war	rming.
<b>B</b> Mention the impo	rtance of :			
1. Liquid sodium.		2. Cobalt 60		í
3. Van-Allen belts.		4. Nummulite	fossils.	1
Question 4		•		. *
<b>A</b> Write the balance	d equations the exp	ress the following rea	ctions :	
1. Copper with dilu	te hydrochloric acid	• •		
2. Decomposing th	e acidified water by	electricity.		
<b>B</b> Mention one exan	iple for: 1. Endange	red plants.	2. Extinct bird.	
<b>(</b> Put ( <b>√</b> ) or ( <b>火</b> ) ,th	en correct the wron	a ones :		
	ly their planes in trop			( )
<u>-</u>	are considered as pe	· -		( )
	_ :	omic radius of an atom.		( )
4. Metals oxides ar				( )
Giza Go	overnorate		a Directorate Lang. School	>
Answer the following	questions :			
Question				
A Complete the follo	owing statements :			
1. The strongest me	etal is, while	the strongest nonmetal	is	
2. Water andpolar compounds		ls, while hydrogen sulp	hide and ar	re non-
3. During electroly evolves above ca		· gas evolves abo	ove anode, while.	gas
4. The hottest atmo	spheric layer is	, but all weather char	nges occur in	layer.
5. From the reasons	s of recent extinction	are and		



- **B** Mention one importance of :
  - 1. Fossils.
- 2. Ozone gas.
- 3. Altimeter.
- 4. Cobalt 60.
- © Calculate the temperature at a height 3 km if you know that the temperature at the sea level is 26°C.

- **A** Give reasons for each of the following:
  - 1. The atomic size increases by increasing the atomic number in the same group.
  - 2. Water is used to put off fires.
  - 3. Pilots prefer to fly their aeroplane in the lower part of stratosphere.
  - 4. Extinction of dodo bird.
  - 5. Ozone hole increases in September each year.
  - 6. El Mokattam Mountain was a part of sea floor.
- B What is meant by ...? 1. Atmospheric pressure.
- 2. Picometer.

- **©** Give one example of :
  - 1. Alkaline earth metal.

2. Greenhouse gas.

3. Endangered organism.

4. Micro fossil.



- A Write the scientific term of the following:
  - 1. The ecosystem that contain few numbers of living organisms and severely affected by extinction of any organism.
  - 2. Losing parts of ozone layer due to the pollutants.
  - 3. Traces or remains of old living organisms preserved in sedimentary rocks.
  - 4. Group of elements lie in the middle of modern periodic table.
  - 5. Any addition in water that change its properties and affect the health of living organisms.
  - 6. Safe areas established for the endangered species in their homeland.
- **B** Compare between:
  - 1. Mesosphere and thermosphere

(height - importance)

2. Basic and acidic oxide

(example - effect on two litmus paper)

- **@** Locate the position of the following elements in the modern period table :
  - 1. 23 Na

 $2._{10}^{20}$  Ne



	. <del>.</del>
Question 4	
Put $(\checkmark)$ or $(x)$ , then correct the wrong ones:	
1. The elements of group (7A) are called alkaline metals.	(
2. Tasmanian cat is a mid way between horse and zebra.	(
3. Bald eagle lost its nests after building of high dam.	( )
4. The atmospheric pressure decreases as the height above sea level increase	s. (
5. Ultraviolet rays have thermal effect, but infrared rays have chemical effect	t. (
6. Index fossils indicate the age of sedimentary rocks.	(
Show by balanced equation :	
1. Burning of magnesium ribbon in presence of oxygen.	
2. Reaction between halogen with metallic element.	
10 Giza Governorate Science Orientation Of	fice
nswer the following questions :	
Question 1	
Complete the following statements:	
1. Mendeleev arranged the elements ascendingly according to, while	Moseley
arranged them ascendingly according to	
2. Archaeopteryx represents the link between and	
3. Fossils are used in exploration and determining the age of	

- **B** Locate the position of the following elements in the modern periodic table :
  - 1. <sub>2</sub>He

- 2. <sub>20</sub>Ca
- $\bigcirc$  Calculate the height of a mountain if the temperature at its foot is 30°C and at its top is -9°C.

- Choose the correct answer:
  - 1. .... is considered from halogen.
    - a. Sodium
- b. Iodine
- c. Helium
- d. Calcium
- 2. Scientist ...... discovered the atom contains positive nucleus.
  - a. Rutherford
- b. Mendeleev
- c. Mosely
- d. Hoffman

3. Sodium oxide from	oxides.		
a. amphoteric	b <sub>.</sub> acidic -	c. nonmetallic	d. basic
4. All of the following	g elements from sem	imetals except for	• •
a. telerium	b. silicon	c. boron	d. chlorine
5. The strongest nonn	netal lies in the	group.	
a. 2A	b. 1A	c. 1B	d. <b>7A</b>
6. Ozone layer is mea	sured by a unit calle	d	
a. km	b. dobson	c. UV	d. mm <sup>3</sup>
7. All are greenhouse	gases except		
a. $CO_2$	b. O <sub>2</sub>	c. N <sub>2</sub> O	d. CH <sub>4</sub>
8 protectorate	is the first establishe	d natural protectorate in	Egypt.
a. Saint Cathrine	b. Ras Mohamed	c. Wadi Hetan	d. Petrified forest
What is the importa	nt of ?		

1. Aneroid.

2. Ionosphere.

### Question 3

#### Write down the scientific term of the following:

- 1. A molecule is formed from combining an atom of an element to a molecule of the same element.
- 2. Continuous increase of the average temperature of the air near the surface of the Earth.
- 3. Atmospheric layer in which meteors are formed.
- 4. One of the atmosphere components that its ratio increased in recent years to reach about 0.038%.
- 5. A type of ultraviolet radiation that is absorbed completely (100%) in the Ozone layer.
- 6. Remains of old organisms that lived in the past for a certain period and then became extinct.
- 7. Replacing, part by part, the wood material of trees by silica to form petrified woods.

#### B Write the balanced chemical equations which express reaction of:

- 1. Magnesium oxide with water.
- 2. Sodium with water.



- **Solution** Exclude the unsuitable word and mention what the rest has in common:
  - 1. Dodo / Quagga / Bald eagle / Tasmanian cat.
  - 2. Panda / Rhinoceros / Golden frog / Bald eagle.
- (B) Choose from column (B) what suits in column (A):

(A)	<b>(B)</b>
Probably harm	Responsible pollutant
1. Death of brain cells	a. Lead.
2. Cancer of liver	b. Sodium.
3. Blindness	c. Mercury.
	d. Arsenic.

- (G) Give reasons for each of the following:
  - 1. Elements of group (1A) called alkali metals.
  - 2. Water has neutral effect on litmus paper.
  - 3. Radioactive cobalt is used in preservation of food.

### 11 Giza Governorate

Science Inspection

Answer the following questions:

- Complete the following statements:
  - 1. Archaeopteryx represents a link between ....... and ..........
  - 2. Ultraviolet radiation has a ...... effect, and the infrared radiation has a ..... effect.

  - 5. Elements of group 1A are called ........ , while elements of group 7A are called ..........

			_ Final Exams /
B Mention the impor	tance of each o	f the following:	
1. Liquefied nitroge	en. 2.	Van-Allen belts.	3. Altimeter.
(c) If the temperature at its foot is 39°C.	-	ountain is Zero°C find	its height if the temperature
Question 2			
<b>⚠</b> Choose the correct	t answer :		
1. The is an 6	example of micro	ofossils.	,
a. Mammoth	b. ferns	c. foraminifera	d. Archaeopteryx
2. In the same perio	d, the element the	at has the highest electro	onegativity lies in group
a. zero	b. 7A	c. <b>2A</b>	d. 1A
3. Meteors are form	ned in	*	
a. mesosphere	b. ionosphere	e c. exosphere	d. stratosphere
4. All the following	are greenhouse	gases except	
a. CO <sub>2</sub>	b. O <sub>2</sub>	c. N <sub>2</sub> O	d. CH <sub>4</sub>
5 indicates t	he presence of p	etroleum.	·
a. Fossils	b. Protectora	te c. Evolution	d. Ecological equilibrium
6. The most metalli	c element in the	periodic table is	
a. Na	b. <b>K</b>	c. <b>F</b>	d. Cs
B Give reasons for e	ach of the follow	ving :	
1. In the same perio	od the atomic size	e decrease by increasing	g atomic number.
_		suitable for flying plane	
<b>©</b> What happens who	en ?		
1. The water tempe		o 4°C.	
2. Absence of ionos	•		
2.710001100 01 101100	Priore.		

#### **M** Write the scientific term of the following:

- 1. The process of replacing part by part the wood material by silica.
- 2. The series in which metals are arranged in descending order according to their chemical activity.
- 3. The weak electrostatic attraction between water molecules.

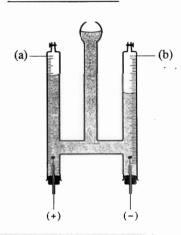


- 4. The death of all members of species of living organisms.
- 5. The block that is found below the modern periodic table.
- 6. The measuring unit of atomic radius.
- Write the balanced chemical equation for:
  - 1. Reaction of carbon dioxide with water.
  - 2. Magnesium with dilute hydrochloric acid.
- (Compare between troposphere and stratosphere. (concerning temperature and thickness)

- Correct the underlined word:
  - 1. Dodo bird is from endangered species.
  - 2. Fluorine is the only liquid halogen.
  - 3. Mammoth is considered an example of a solid cast.
  - 4. Sodium causes death of brain cells.
  - 5. Elements are arranged in Mendeleev periodic table according to atomic number.
  - 6. Sodium chloride is from polar covalent compound.
- B Look at the opposite figure, then answer:
  - 1. What is name of this device?
  - 2. Write the balanced chemical equation of this reaction.
  - 3. Write the labels:

a. ..... gas.

b. .... gas.



### 12

### **Qaliubya Governorate**

Obour Educational Directorate Al-Resala Language School

#### Answer the following questions:

- Complete the following statements:
  - 1. Among the pollutants of ozone layer are ....... compounds that are used in air conditioning sets and ....... compounds that are used in fire extinguishing.

- 4. Elements of "s" block are located on the ....... of the periodic table and they are arranged in ...... groups.
- 5. Increasing the mercury concentration in drinking water causes ......., while arsenic increases the infection rate by ...........

#### B Write one importance of each of the following:

- 1. Ozone layer.
- 2. Altimeter.

3. Fossils.

### Question 2

#### ■ Write the scientific term for each of the following:

- 1. They are safe areas established to protect endangered species in their homeland.
- 2. An atom of nonmetallic element that gains one or more electrons during chemical reactions.
- 3. Two magnetic belts help in scattering the harmful cosmic radiation away from the Earth.
- 4. It is a series in which metals are arranged in a descending order according to their chemical activity.
- 5. Arrangement of the elements in an ascending order according to their atomic weight.

#### **B** Complete the following equations:

### Question 3

#### **A** Choose the correct answer:

- 1. The scientist ...... had discovered the main energy level.
  - a. Rutherford
- b. Bohr
- c. Hoffmann
- d. Moseley
- 2. All the following elements are metalloids except .........
  - a. tellurium
- b. silicon.
- c. boron.
- d. bromine.

- 3. Pilots prefer to fly planes in the ...... layer.
  - a: thermosphere
- b. mesosphere
- c. troposphere
- d. stratosphere



4. Panda bear be	ecame extinct due to				
a. weakens th	e reproduction rates.	b. overhunting.			
c. its short leg	gs.	d. (a) & (b).	•		
5. All are green	gases except				
a. CO <sub>2</sub>	b. N <sub>2</sub> O	c. CH <sub>4</sub>	d. Cl <sub>2</sub>		
B Problem :					i
If the temperatu	re at the sea level is 39	.5°C. Find the tempera	ture at the top of mour	ntain	of
height 3 km abo	ove the sea level.			,	
Mention 2 prop	perties for halogens.				
Question 4					
	÷		<del>-</del>		
	,then correct the wro		•		
1. Moseley class	sified elements of each	main group into two s	ubgroups.	(	)
2. Oxygen gas e	evolves on reaction of s	odium with water.		(	)
3. Archaeoptery	x fossil is considered a	link fossil between bir	rds and amphibians.	(	)
4. Water density	increases on freezing.	•		(	)
5. Extinction of	some polar animals is	one of the negative eff	ects of ozone erosion		
phenomenon.				(	)
<b>B</b> What is meant	by ?				
1. Atmospheric	pressure.				
2. The moment	of extinction.				
3. Hydrogen bo	nd.				
Question 5					
A Give reasons fo	or each of the followin	ıg:			
1. Petrified woo	d are considered from	fossils although they lo	ook like rocks.		
2. Cobalt 60 is u	used in food preservation	on.			
3. Water is a pol	lar compound.				
4. Increasing in	CO <sub>2</sub> gas ratio in the at	mosphere.			
B Locate the posi	tion of the following	in the modern periodi	ic table :		
1 D ·	_	2 Ne			

- (B) What will happen in the following .....?
  - 1. Storing water in plastic bottles.
  - 2. Dipping old insects in resinous materials of old pine trees.

### 13

#### **Alexandria Governorate**

Agamy Educational Zone
Experimental Science Inspectorate

#### Answer the following questions:

### Question 1

- **A** Complete the following statements:
  - 1. Mendeleev organized the element according to the similarity in .........
  - 2. The density of air on the top of a mountain is ...... than the density of air at the Earth's surface.
  - 3. The valency of alkaline metal elements is .........
  - 4. The suitable medium to form a mammoth fossil is .........
- B Calculate the height of a mountain if the temperature at its foot is 24°C and at its top is 11°C.
- Write the balanced chemical equation which represents the reaction of magnesium oxide with water.

- Mrite the scientific term:
  - 1. The atmospheric envelope layer that contains a certain amount of helium and hydrogen.
  - 2. The block contains the group transition elements.
  - 3. Charged layer reflects radio waves.
  - 4. The continuous decrease without compensation in the number of a certain species of living organisms until all members die out.
  - 5. Continuous increase of the average temperature of the near the surface of the Earth.
- B What is meant by metaloids?
- Put ( v) or (x) in front of each statement :
  - 1. Bohr had discovered main energy levels. ( )
  - 2. The ozone layer lies in the troposphere layer. ( )
  - 3. The halons are produced from the burning of supersonic air planes fuel. (

A	Give reasons for each of the following:
	1. Although sugar is a covalent compound, it dissolves in water.
	2 Ozone hole increases in September each year on South Pole

	2. Ozone hole increases in Sep	tember each year on South Pole.	
B	Explain the behaviour of the	following elements with water:	
	1. Zinc.	2. Copper.	3. Sodium.
C	The elements $^{10}$ Y from the elements	ements of the modern periodic ta	ble find :
	1. The electronic configuration	2. The number of per	iod.
	3. The number of group.		

A Choo	se the correct a	nswer :		
1. The	e unit of measuri	ng the degree of Oz	one layer is	
a. k	cm	b. liter	c. Dobson	d. cm
2. All	the following ga	ses are green house	gases except	
a. <b>(</b>	$CO_2$	b. <b>O</b> <sub>2</sub>	c. CH <sub>4</sub>	d. N <sub>2</sub> O
3	from positive	ely charged ions who	en they enter in chemica	al reaction.
a. I	nert gases	b. Halogens	c. Nonmetals	d. Alkalie metals
4. Me	eteors are formed	in		
a. r	nesosphere	b. ionosphere	c. exosphere	d. stratosphere
5	in its salt sol	ution.		
a. I	odine replaces fl	uorine	b. Bromine replaces f	luorine
c. I	odine replaces c	hlorine	d. Chlorine replaces b	romine
6. Hy	drogen element l	pelongs to		, <del>, , , , , , , , , , , , , , , , , , </del>
a. g	group 1A	b. group 2A	c. zero group	d. group 3 A

- **B** Mention the pollutants of ozone hole.
- **(**) Arrange the atmospheric layers ascending according to the thickness.



### Alexandria Governorate

Montazah Educational Zone Frontiers Language School

#### Answer the following questions:

100		2250		<b>A</b>
ഭ	IIAS	tior	1 C	
	003		' '	w
10,000				lacksquare

A	Choose	the	correct	answer	,
44.7	4110000			C1110 40 C1	

Choose the correct	answer :		
1. The element whic	h its atomic number	18 is	<i>,</i>
a. transitional eler	nent	b. inert gas	· · · · · · · · · · · · · · · · · · ·
c. metallic elemen	it	d. halogen element.	
2. The device used i	n measuring the atm	ospheric pressure is	····· •
a. voltameter	b. barometer	c. hydrometer	d. micrometer
3. The density of ice	is than the de	nsity of water.	•
a. less	b. more	c. equal	d. (a), (b)
4. Ozone layer is for	and in the		
a. troposphere	b. stratosphere	c. mesosphere	d. thermosphere
5. The block which o	contain groups 1A, 2	A in the periodic table is	s
a. s	b. p	c. d	d. f
6 form positi	vity charged ions wh	en they enter the chemi-	cal reactions.
a. Inert gases	b. Nonmetals	c. Halogen	d. Alkaline earth metals

### B Mention one importance of: 1. Altimeter.

2. Ozone layer.

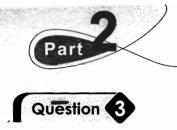
### Question 2

#### Murite the scientific term:

- 1. The vertical column in Mendeleev's table.
- 2. A kind of oxides reacts as basic or acidic oxides according to the reaction conditions.
- 3. The ability of the atom in covalent molecule to attract the chemical bond electrons to it.
- 4. The traces and remains of old living organisms which are preserved in the sedimentary rocks.

#### Mention one difference between each of :

- 1. Natural and industrial water pollutants.
- 2. The mammoth and amber fossils.



Put (./) or (w) then correct the				
rat (V) or (X) their correct the	wrong ones:			
1. Hoffman's voltameter apparatu	s is used in the	electrolysis of w	vater.	( )
2. Methyl Bromide is used in exti	nguishing fires.			( )
3.50% of the mass of the atmospl	heric envelope i	s in some area b	etween sea level	
and 3 km elevation.				( /)
4. Each main energy level contain	s a number of s	ublevels.		( )
Locate the following elements in	n the modern p	eriodic table :		
-		<sup>23</sup> <sub>11</sub> Na	<sup>24</sup> <sub>20</sub> Ca	
Correct the underlined words:			<del>-</del> .	
1. Petrified wood is considered from	om rocks.			
2. The strongest nonmetal elemen	t locate at grou	<u>p 1A</u> .		
Question 4				
Give reasons for each of the foll	lowing :			
1. Pure water doesn't affect the lit	tmus paper.			
2. Silicon slides are used in makir	ng computers.			
3. Elements of group (1A) are known	own as alkali m	etals.		
4. Pilots prefer to fly in the lower	part of stratosp	here.		
Complete the following sentence	es:			
1. 2H <sub>2</sub> O electrolysis +	<b></b>			
		e which c	arries the	details of
the snail.			· · · · · · · · · · · · · · · · · · ·	
3. The electronegativity in	periods from le	ft to right, while	it in grou	ps from
up to down.				
4. From the harmful effect of far a	and medium ult	raviolet radiatio	ns on amphibians	are
and				
	1. Hoffman's voltameter apparatu  2. Methyl Bromide is used in exti  3. 50% of the mass of the atmosphand 3 km elevation.  4. Each main energy level contain  Locate the following elements in  35 Cl 4 He  Correct the underlined words:  1. Petrified wood is considered from  2. The strongest nonmetal element  Question 4  Give reasons for each of the foll  1. Pure water doesn't affect the lift  2. Silicon slides are used in makin  3. Elements of group (1A) are known  4. Pilots prefer to fly in the lower  Complete the following sentence  1. 2H <sub>2</sub> O electrolysis  2. When the snails shell decomponing the snail.  3. The electronegativity	<ol> <li>Methyl Bromide is used in extinguishing fires.</li> <li>50% of the mass of the atmospheric envelope in and 3 km elevation.</li> <li>Each main energy level contains a number of standard the following elements in the modern passion of the following elements in the modern passion of the underlined words:         <ol> <li>Petrified wood is considered from rocks.</li> <li>The strongest nonmetal element locate at ground element locate at ground element locate at ground elements of ground elements.</li> <li>Pure water doesn't affect the litmus paper.</li> <li>Silicon slides are used in making computers.</li> <li>Elements of group (1A) are known as alkali made.</li> <li>Pilots prefer to fly in the lower part of stratosphologophy electrolysis entences:</li> <li>2H<sub>2</sub>O electrolysis e</li></ol></li></ol>	1. Hoffman's voltameter apparatus is used in the electrolysis of w 2. Methyl Bromide is used in extinguishing fires. 3. 50% of the mass of the atmospheric envelope is in some area be and 3 km elevation. 4. Each main energy level contains a number of sublevels.  Locate the following elements in the modern periodic table:  35 Cl 4 He 23 Na  Correct the underlined words:  1. Petrified wood is considered from rocks.  2. The strongest nonmetal element locate at group 1A.  Question 4  Give reasons for each of the following:  1. Pure water doesn't affect the litmus paper. 2. Silicon slides are used in making computers. 3. Elements of group (1A) are known as alkali metals. 4. Pilots prefer to fly in the lower part of stratosphere.  Complete the following sentences:  1. 2H <sub>2</sub> O electrolysis	1. Hoffman's voltameter apparatus is used in the electrolysis of water.  2. Methyl Bromide is used in extinguishing fires.  3. 50% of the mass of the atmospheric envelope is in some area between sea level and 3 km elevation.  4. Each main energy level contains a number of sublevels.  Locate the following elements in the modern periodic table:  3. Each main energy level contains a number of sublevels.  Locate the following elements in the modern periodic table:  3. Each main energy level contains a number of sublevels.  2. The strongest nonmetal element locate at group 1A.  Question 4  Give reasons for each of the following:  1. Pure water doesn't affect the litmus paper.  2. Silicon slides are used in making computers.  3. Elements of group (1A) are known as alkali metals.  4. Pilots prefer to fly in the lower part of stratosphere.  Complete the following sentences:  1. 2H <sub>2</sub> O electrolysis

### **Sharkia Governorate**

6. Fossils are often found in ..... rocks.

b. sedimentary

c. volcanic

a. metamorphic

### Educational Directorate

Answer the following	questions: •		
Question 1	\ \ \		
A Complete the follo	wing statements :		
1. The modern period number of		horizontal perio	ods which represent the
2. Most weather fea layer.	tures occur in	layer whereas satellite	es swim through the
3. Resinous is secre	ted from trees	which were common	during some
4. Among the pollut	ants of ozone layer are	compounds that	at are used in air conditioning.
5. The measuring u	nit of atomic size of a	tom is	•
6. From the harmfu	l effects of far and me	edium ultraviolet rays	on Human are
7. Metal oxides are	oxides, while	nonmetal oxide are	oxides.
B Give an example for	or the following:		
1. Green house gase	es.	2. Fossil of co	omplete body.
mountain of heigh	at the sea level is 20 at 2 km above earth's	_	erature at the top of a
Question 2			
Choose the correct	answer :		
1. The scientist who	discovered the main	energy levels is	
a. Mendeleev.	b. Bohr.	c. Moseley.	d. Rutherford.
	ich its atomic number ch its atomic number		s chemical construction to
a. 2	b. 7	c. 9	d. 19
3. Meteors are burn	t in the layer	•	
a. troposphere.	b. stratosphere.	c. mesosphere.	d. thermosphere.
4. The device used	in measuring the altit	ude from the Earth su	rface is
a. altimeter.	b. aneroid.	c. barometer.	d. (a) and (b).
5. The strongest alk	aline Earth metal in r	eaction with water is	
a. magnesium	b. calcium	c. barium.	d. sodium.

d. igneous



- B What is meant by ....?
  - 1. Chemical activity series.
- .2. Metalloids.
- The element  $\binom{35}{17}$ Y) from elements of the periodic table, Find the atomic number of :
  - 1. The element before it in the same period.
  - 2. The element before it in the same group.

- Mrite the scientific term:
  - 1. The boundary separating between stratosphere and mesosphere where temperature rather constant.
  - 2. The ability of the atom in the covalent molecule to attract the electrons to it.
  - 3. A kind of elements symbolized by letter (B).
  - 4. Mixing of animal and man wastes with water.
  - 5. The block that contains the groups from 3A to 7A.
  - 6. Non-flying bird which became extinct.
- **B** What is the importance of ...?
  - 1. The two Van Allen's belts.
- 2. Natural protectorate.

- Compare between:
  - 1. Alkali metals and Alkaline Earth metals.
  - 2. Single covalent bond and hydrogen bond in water.

- A Give reasons for each of the following:
  - 1. Elements of the same group have similar properties.
  - 2. Removing trees of tropical forests is one of the most important factors of extinction.
  - 3. Ammonia is considered a polar covalent compound.
  - 4. Sodium and potassium are very active metals.
- B Locate the position of the following elements in the modern periodic table:
  - 1. <sub>20</sub>Ca
- 2. <sub>15</sub>P
- 3. <sub>10</sub>Ne
- Write the symbolic chemical equation which expresses the following reaction:
  - 1. Bromine with potassium iodide.
    - 2. Sodium with diluted hydrochloric acid.
    - 3. Water electrolysis.

### 16 Kafr El-Sheikh Governorate

#### Science Supervision

#### Answer the following questions:

### Question 1

#### Complete the following statements:

- 1. Scientist ...... discovered the main energy levels in the atom.
- 2. The modern periodic table consists of ......... horizontal periods and ...... vertical groups.
- 3. The aneroid is used to .........
- 4. The second layer of the atmospheric envelope is called .........
- 5. The ozone is measure by a unit called ..........

#### B What is the importance of the following ...?

- 1. Liquefied nitrogen.
- 2. Methyl bromide.

### Question 2

#### Mrite the scientific term:

- 1. A bond that exists between water molecules.
- 2. Charged layer reflects radio waves.
- 3. Elements that have both properties of metal and nonmetal.
- 4. The ascending order of the elements according to their atomic number.
- 5. A phenomenon looks like a colorful light curtains seen in the two poles.
- 6. A kind of elements in which their valency electrons contain more than four electrons.

#### B Give reasons for each of the following:

- 1. The lower part of the stratosphere is suitable for flying of airplanes.
- 2. The use of radioactive  $Co_{60}$  in food preservation.

- Mention four factors causing extinction of species.
- **B** Problem: Calculate the height of a mountain if the temperature at its base is  $(30^{\circ}\text{C})$  and at its top is  $(-9^{\circ}\text{C})$ .



A Put (√) or (x	,then correct	the wrong	ones:
-----------------	---------------	-----------	-------

1. Scientists classified the elements in order to facilitate their study.	(	)
2. Wind moves from regions of high pressure to regions of low pressure.	(	)
3. The number of electrons in positive ions is greater than that of its atom.	(	)

5. 
$$CFCl_3 \stackrel{UV}{\longrightarrow} CFCl_2 + Cl$$

6. The scientist Moseley arranged elements ascendingly according their atomic mass. (

#### B Choose the correct answer:

1		•		£	1.01.0000
1	• • • • • • • • • • • • • • • • • • • •	1S	considered	irom	naiogens.

- a. Sodium b. Chlorine
- c. Helium
- d. Calcium
- 2. When sodium reacts with water, ........ gas evolves.
  - a. O<sub>2</sub>
- b. CO,
- c. H<sub>2</sub>

- $d. N_2$
- 3. The oxide which dissolves in water and produces an acid is .........
  - a. MgO
- b. FeO
- c. CuO
- d. CO<sub>2</sub>
- 4. The transitional elements start to appear from the beginning of the ...... period.
  - a. second
- b. third
- c. fourth
- d. fifth

### Menofia Governorate

#### El-Sadat Directorate

#### Answer the following questions:

# Question (

#### A Choose the correct answer:

- 1..... form positively charged ions when they inter in a chemical reaction.
  - a. Alkalie metals
- b. Inert gases
- c. Halogens
- d. Nonmetals
- 2. Mendeleev arranged elements a scendingly according to their .........
- - a. atomic number. b. atomic weight. c. neutrons number. d. protons number.
- 3. Meteors are formed in .........
  - a. exosphere
- b. thermosphere
- c. mesosphere
- d. stratosphere



- 4. From common recently extinct species is (are) .........
  - a. dodo bird.

b. passenger pigeons.

c. golden frog.

- d. all the previous.
- B The element (Y) is from the elements of the periodic table find :
  - 1. Its electronic distribution.
- 2. The group number and period number.
- 3. The atomic number of element following it in the same period.
- 4. The atomic number of element following it in the same group.
- Mention one difference between each of the following:
  - 1. Alkali metals and Alkaline earth metals.
  - 2. Troposphere and stratosphere.

### Question 2

- Complete each of the following:
  - 1. Halogens elements lie in the ...... group.
  - 2. The standard atmospheric pressure at the sea level is ...... millibar.
- B Give reasons for each of the following:
  - 1. Liquefied nitrogen is used in preserving cornea.
  - 2. The lower part of stratosphere layer is suitable for airplanes.
  - 3. Nummulites are considered as an index fossil.
  - 4. Sodium is kept in kerosene.
- Mention the negative effects of global warming phenomenor.

- Mrite the scientific term:
  - 1. The hottest atmospheric layer.
  - 2. The traces and remains of living organisms which are kept in sedimentary rocks.
  - 3. It is used inside the refrigerator to get rid of any undesirable odour.
  - 4. The process that converting the molecules of some covalent compounds into ions.



- B Write the chemical equation that represents the following:
  - 1. Dissolving of magnesium oxide in water.
  - 2. The reaction between clorine gas and potassium bromide.
  - 3. The reaction of copper with dilute hydrochloric acid.
- **(6)** To whom are these achievements attributed :
  - 1. He discoverd that the nucleus contains positively charged protons.
  - 2. He added zero group to periodic table.
  - 3. The discovery of the existence of two magnetic belts around the Earth.

- **A** Correct the underlined words:
  - 1. The mold is dying out of all members of species of living organisms:
  - 2. The electronegativity values increase in the groups as the atomic number increase.
  - 3. From harmful effects of far and medium ultraviolet rays on humans are **spoil eggs** and **upsetting the photosynthesis process.**
- **B** What is the results of ....?
  - 1. Water density decreases on freezing.
  - 2. Storing tap water in plastic bottles.
- Mention the importance of fossils.

### 18 El Gharbia Governorate

Central Science Supervision

#### Answer the following questions:

- A Complete each of the following:
  - 1. Moseley put ...... and ..... series below periodic table.
  - 2. ..... is the third atmospheric layer with thickness about ........
  - 3. Water is good polar solvent for most ....... and for some of ...... which form hydrogen ponds with water.
  - 4. ..... + 2 KI → 2KBr + ......
  - 5. ..... and ..... are examples of endangered animals.

- **B** Give reasons for each of the following:
  - 1. Methane is not considered a polar compound.
  - 2. Amber is considered a suitable medium for formation of complete body fossils.
  - 3. It is difficult to identify metalloids by knowing their atomic configuration.
- Find the temperature at a point of height 10000 meters above the sea level if the temperature at the sea level is 24°C.

- Mrite the scientific term:
  - 1. A unit used for measuring ozone degree.
  - 2. The process of converting the molecules of some covalent compounds into ions.
  - 3. The continuous decrease in the number of the same species of a living organism, without compensation, until they all die out.
  - 4. The region where the atmospheric envelop merges with the outer space.
  - 5. The element which has the highest electronegativity.
- B What happens when ....?
  - 1. There is no ionosphere layer at the end of thermosphere layer.
  - 2. Adding the violet litmus solution to magnesium oxide.
  - 3. Infrared radiation don't reemit back from troposphere layer.
- What is meant by ....?:
  - 1. Petrified fossil.

2. Electronegativity.

- Correct without changing the underlined in the following statements:
  - 1. The halons are produced from supersonic airplanes.
  - 2. Archaeopteryx fossil is the link between mammals and birds.
  - 3. Halogens are **divalent metals**.
  - 4. The elements are arranged <u>descendingly according to their atomic weight</u> in Moseley periodic table.
- Write the balanced chemical equations which express the following reactions:
  - 1. Carbon dioxide with water.
  - 2. Magnesium with dilute hydrochloric acid.



- Mention one use for each of the following:
  - 1. Aneroid.
- 2. Cobalt 60

- Explain how can you differentiate between magnesium oxide and sulphur oxide. (Support your answer by chemical equations if possible).
- Mention an example for each of the following:
  - 1. Microfossil.
- 2. An endangered plant.
- 3. Green house gases.

- @ What is the importance of ...?
  - 1. The two Van Allen's belts.
- 2. Natural protectorate.

3. The index fossils.

4. Nummulites fossils in Mokattam mountain.

### 19 Port Said Governorate

#### Educational Directorate

#### Answer the following questions:

- Complete each of the following:
  - 1. Mg + 2HCl → ..... + ......
  - 2. Fossils are used in ...... exploration and determining the age of ...... rocks.
  - 3. There are ...... bonds between water molecules. And water has ...... effect on litmus paper.
  - 4. ..... and ..... are examples of microfossils.
- B) If the temperature at the base of a mountain is 20.6°C how much is the temperature at the top if the mountain height is 8862 m?
- (a) Give reasons for each of the following:
  - 1. Pilots prefers flying in the lower of stratosphere?
  - 2. Rhinoceros is an endanger animal.
  - 3. The use of radioactive cobalt 60 in food preservation.

- Murite the scientific term:
  - 1. The ability of the atom in the covalent molecule to attract the chemical bond electrons to it.
  - 2. Continuous decreases in numbers of species members without compensation until all die out.
  - 3. They are metals that react in high temperature with only hot water vapour.
  - 4. Safe area established to protect species that face danger in their home land.
- B 1. During the electrolysis of acidified water by using Hofamann's voltmeter calculate the volume of the gas that evolved at the anode if the volume of the gas that evolved on cathode is 40 cm<sup>3</sup>?
  - 2. Write the balanced chemical equations which express the following reactions:
    - 1. Electrolysis of water.
    - 2. Passing chlorine gas in potassium bromide solution.
- C Compare between basic oxide and acidic oxide.

### Question 3

A Choose from column (8) what suits in column (A) :

(A)	<b>(B)</b>
1. Death of brain cells.	a. Mercury.
2. Cancer of liver.	b. Sodium.
3. Blindness.	c. Lead.
4. Separation of dissolved oxygen	d. Arsenic.
	e. Water thermal pollution.

- B Classify these land animals into extinct or endangered species:

  Panda bear Golden frog Ibis bird passenger pigeon.
- Correct the underlined words:
  - 1. Elements of group 1A are known as inert gas.
  - 2. Quagga is an extinct animals that has a wolf's head, a dog tail and a tiger's skin.



- 3. Chemical pollution of water causes many diseases as typhoid and haplites.
- 4. Cesium is the least metallic element in group 1A.

A.	Choose	the	correct	answer	
CT.	4110050	A 4 (1.29)	221124	ere in a sa et i	•

- 1. The atomic number of an element that lies in period 4 and group 2 A.
  - a. 4

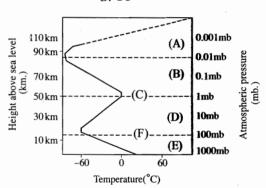
- b. 18
- c. 20

- d. 30
- 2. Complete body fossils of insects are found preserved in ..........
  - a. amber
- b. snow
- c. ocean
- d. milk
- 3. ..... is result(s) from the burning of fuel of ultrasound airplane (concord).
  - a. Methyl bromide b. Halons
- c. Freon
- d. Nitrogen oxides
- 4. s-Block elements are arranged into ...... groups.
  - a. 3

- b. 2
- c. 6

d. 10

 The opposite figure exhibits the temperature changes in the layers of atmospheric envelope. Replace the letters on the drawing with suitable labels.



#### What is meant by ....?

- 1. Atmospheric pressure.
- 2. Petrified fossils.
- 3. Global warming.

#### **Suez Governorate**

Suez Educational Zone

#### Answer the following questions:

### Question •

#### (A) Complete the following statements:

- 1. Mendeleev arranged the elements ascendingly according to ......, while Moseley arranged them ascendingly according to .....
- 2. The alkali metal element are ..... valent.
- 3. The d-block contains ..... elements.

- 4. The thickness of troposphere is about ......5. Halogens elements lie in the ...... group.
- **B** Locate the position of the following element in the modern periodic table :
  - 1. <sub>10</sub>Ne

- 2. 20Ca
- Mention one difference between each of: Simple and complicated ecosystem.

#### **M** Write the scientific term :

- 1. Charged layer reflects radiowaves.
- 2. Remains of old organisms that lived in the past for a certain period and then became extinct.
- 3. A kind of elements in which their valency electrons contain less than 4 electrons.
- 4. A phenomenon that increases the percentage of carbon dioxide and leads to an increase in temperature.
- 5. A layer of the atmospheric envelope in which air moves vertically.
- 6. Safe places are specialized for protecting endangered species in their original inhabitant.
- **B** Write the balanced chemical equations which express reaction of:
  - 1. Magnesium with dil.hydrochloric acid.
  - 2. Carbon dioxide with water.

### Question 3

#### **A** Choose the correct answer:

- 1. There are ..... bonds between the water molecule.
  - a. hydrogen
- b. covalent
- c. ionic
- d metallic
- 2. Scientist ..... discovered the main energy levels in the atom.
  - a. Bohr

- b. Mendeleev
- c. Moseley
- d. Hoffman
- 3. Normal atmospheric pressure equals ..... millibar.
  - a. 1013.25
- b. 76
- c. 1.013
- d. 760
- 4. Complete fossils of insects are found preserved in .....
  - a. ammonites.
- b. amber.
- c. igneous rocks.
- d. ambergris.
- 5. .... protectorate is the first established natural protectorate in Egypt.
  - a. Saint Catharine
- b. Ras Mohamed c. Wadi Hetan
- d. Petrified forest



6. The number of negative electrons in the normal state equals .........

a. number of protons.

- b. number of neutrons.
- c. twice the number of protons.
- d. half the number of neutrons.
- Mention one use: 1. Cobalt 60.
- 2. Satellites.
- @ Calculate the height of a mountain if the temperature at it foot is 20°C and its top is -6°C.

### Question 4

- Correct the underlined words:
  - 1. Each period end with a nonmetal.
  - 2. The elements of the  $1^{\underline{st}}$  group (1A) are known as alkaline earth metals.
  - 3. The trace is what the living organism leave after its death in the sedimentary.
  - 4. The immigrating pigeon is from the birds that can't fly because of its small wings.
  - 5. Petrified wood is considered from **rocks**.
- Give reasons for each of the following:
  - 1. The lower part of the stratosphere is suitable for flying airplanes.
  - 2. Liquidfied nitrogen is used in preservation of cornea of the eye.
- What are the results of water is polluted by the wastes of man and animal.

insuitable word and mention what the rest has in common:

- 1. Dodo Quagga Bald eagle Tasmanian cat.
- 2. Panda Rhinoceros Golden frog Bald eagle.

### 21 Ismailia Governorate

Ministry of Education

Answer the following questions:

### Question 1

- to that the opposite figure, then answer:
- 1. Which one of the two figures represents a (+ve) ion?
- (+12) ) )



- 2. Which one of the two figures represents a neutral atom?
- Fig. (1)

Fig. (2)

3. Indicate the position of the atom in the periodic table (period and group).

#### Complete the following:

- 1. The ozone layer disperses the .....rayes away from the Earth's surface.
- 2.  $Cl_2 + 2NaBr \longrightarrow \cdots + Br_2$
- 3. Quagga is considered the midway between ...... and ......
- 4. Element of s.block are located on the ...... of the periodic table and they are arranged in ..... groups.

#### Compare between:

- 1. Basic oxides and acidic oxides.
- 2. Mesosphere and troposphere in terms of temperature and structure.

### Question 2

#### Mrite the scientific term:

- 1. The continuous decrease in the number of a certain species of living organisms.
- 2. The separating layer between stratosphere and mesosphere.
- 3. Is the ability of an atom in the covalent compound to attract the electrons of the chemical bond to itself.
- 4. The halogen which exist in a liquid state.
- 5. An endangered animal that feeds on bamboo plant.

#### (B) Mention the importance of :

- 1. Liquid sodium.
- 2. Index fossil.
- 3. Altimeter.

#### What is meant by .....?

1. Chemical activity series.

2. Atmospheric pressure.

### Question 3

#### (A) Choose the correct answer:

- 1. Greenhouse effect explains ......
  - a. erosion of ozone layer.
- b. global warming phenomenon.
- c. a new way of agriculture.
- d. water evaporation.
- 2. There are ..... bonds among the water molecules.
  - a. metallic
- b. hydrogen
- c. ionic

d. covalent



- 3. The element that lies in the same period with 12Mg is .........
  - a. 15P

- b. <sub>7</sub>N
- c. 20Ca
- d. <sub>3</sub>Li

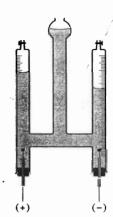
- 4. Rain, wind and clouds occur in ..... layer.
  - a. mesosphere
- b. stratosphere
- c. thermosphere
- d. troposphere
- 5. From common recently extinct species is/are ........
  - a. dodo bird

b. quagga

c. golden frog

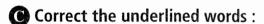
d. all the previours answer

- B The opposite figure represents Hofmann's voltameter which is used in water electrolysis:
  - 1. Write the chemical equation which express the reaction.
  - 2. What is the volume of the gas which burns with a pop sound on approaching a glowing splint to it, it is the volume of the other gas is 6 cm<sup>3</sup>.



Calculate the temperature at the base of a mountain its height is 8000 m. and the temperature at its top is 20°C.

- **A** Give reasons for each of the following:
  - 1. Hunting of Tasmanian cat by the farmers.
  - 2. Florine (F) is considered one of the strongest nonmetallic elements.
  - 3. Water is one of the most important liquids which are used to put of fires.
  - 4. The use of radioactive  $Co_{60}$  in food preservation.
- **B** From the opposite figure, answer the following:
  - 1. Write the symbolic balanced chemical equation.
  - 2. Write the name and the chemical symbole of the evolved gas.



- 1. Ozone layer is measured by a unit called **nanometer**.
- 2. Chemical pollution of water causes many diseases as a typhoid and hepatitis.
- 3. **Rutherford** discovered the main energy levels.
- 4. Archaeopteryx links between reptiles and mammals.



#### **Damietta Governorate**

#### Inspector of Science Official Language Schools

#### Answer the following questions:

### Question 1

#### Choose the correct answer :

- 1. The modern periodic table consists of ...... horizontal periods.
  - a. 7

- b. 10
- c. 14

- d. 16
- 2. The element whose atomic number (18) is ......
  - a. transition element. b. inert gas.
- c. metallic element.
- d. halogen element.
- 3. All of the following gases are greenhouse gases except .....
  - a. CO<sub>2</sub>
- b. **O**<sub>2</sub>
- $c. N_2O$
- d. CH

- 4. Fossils are found in ..... rocks.
  - a. metamorphic
- b. sedimentary
- c. igneous
- d. volcanic

- 5. .... is an example of microfossils.
  - a. Mammoth
- b. Ferns
- c. Foraminifera
- d. Archaeopteryx
- Calculate the atomic number for an element locate in third period and group 7A.
- What will happen in each of the following:
  - 1. Increase in the concentration of mercury in drinking water.
  - 2. The absence of one type of species from the simple ecosystem.

### Question 2

- A Give reasons for each of the following:
  - 1. Dodo bird was an easy target for hunters.
  - 2. Pilots prefer to fly their planes in stratosphere.
  - 3. Cobalt 60 is used in preservation of food.
  - 4. Ionosphere is important for radio station.
- B Locate the position of the following elements in modern periodic table:
  - $1._{7}N$

2. <sub>20</sub>Ca

- Write the scientific term:
  - 1. Elements of d-block in the modern periodic table.

- 2. Elements which have properties of metals and nonmetals.
- 3. Safe places that are specified to protect the endangered species in their original inhabitant.
  - 4. An extinct animal has a wolf's head, a dog's tail and a tiger's skin.
  - 5. A unit used for measuring ozone degree.
- **B** Mention one importance for the following:
  - 1. Silicon.
- 2. Halons.
- 3. Aneroid.
- Mention one difference only between: Troposphere and thermosphere.

- **M** Complete the following:
  - 1. ····· is formed by the combination of three active oxygen atoms.
  - 2. Ultraviolet radiation has ..... effect and infrared radiation has ..... effect.
  - 3.  $2Na + \cdots \rightarrow 2NaOH + H_2$
  - 4. Cl<sub>2</sub> + 2KBr + ········
  - 5. 1 bar =  $\cdots$  millibar.
- B What is meant by .....?:
  - 1. Van-Allen belts.
- 2. Polar compounds.
- 3. Extinction.

### **23**

#### Fayoum Governorate

Inspector of Science Official Language Schools

Answer the following questions:

- **A** Complete the following:
  - 1. Mendeleev arranged the elements ascendingly according to ......., while Moseley arranged them ascendingly according to .......
  - 2. The strongest metal lies in the ...... group while the strongest nonmetal lies in the ...... group.

  - 4. Archaeopteryx represents the link between ...... and .......

- B What is meant by .....?

  1. Chemical activity series.
- 2. Global warming.
- 3. Extinction.

- What is the importance of .....?
  - 1. Liquefied nitrogen.
- 2. Altimeter.
- 3. Coral fossil.

- **(A)** Correct the underlined words in the following statements:
  - 1. Each period in the modern periodic table starts with semimetal element.
  - 2. Sodium oxide from acidic oxides.
  - 3. Meteors burn in stratosphere.
  - 4. Ozone layer is measured by a unit called km.
- B Mention one difference between each of:
  - 1. Flourine molecule and helium molecule.
  - 2. Troposphere and stratosphere.
  - 3. Simple and complicated ecosystems.
- **(**) Locate the position of the following elements in the modern periodic table :
  - 1. 10 Ne

2. <sub>19</sub>K

3. <sub>16</sub>S

### Question 3

- A Write the scientific term for each of the following statements:
  - 1. Safe areas established to protect endangered species in their homeland.
  - 2. The ability of an atom in the covalent compound to attract the bonded electrons to itself.
  - 3. Phenomenon, which appears as brightly coloured light curtains at both the North and South poles of the Earth.
  - 4. Apparatus is used in the electrolysis of water.
- B Choose the correct answer:
  - 1. All the following elements from semimetals except for ......
    - a. tellurium.
- b. silicon.
- e. boron.
- d. bromine.

- 2. ····· indicate (s) extinction.
  - a. Fossils

b. Protectorates

c. Evolution

d. Ecological equilibrium



- 3. The elements of group (17) are called .........
  - a. alkali metals.

b. halogens.

c. inert gases.

d. alkaline Earth metals.

- 4. All are greenhouse gases except .....
  - a. CO<sub>2</sub>
- b, 0,
- $c. N_2O$

d. CH

- What are the results of ...?
  - 1. Storing water in plastic bottles of mineral water.
  - 2. Chlorofluorocarbon compounds increase in atmosphere.

### Question 4

- **M** Give reasons for each of the following:
  - 1. Alkali metals are kept under kerosene in the lab.
  - 2. The lower part of the stratosphere is suitable for flying airplanes.
  - 3. The bald eagle is one of the endangered species.
- Write the balanced chemical equations which express reaction of :
  - 1. Carbon dioxide with water.
  - 2. The reaction between chlorine gas and potassium bromide.
  - 3. The electrolysis of water.
- (i) If the temperature at the base of mount Everest is 20°C, How much is the temperature at its top if the mountain height is 13000 m. ?
- To who are these works/achievements attributed?
  - 1. The discovery that the nucleus of the atom contains positively charged protons.
  - 2. The discovery of the existence of two magnetic belts around planet Earth.

### **24** Beni-Sueif Governorate

Official Language Schools Direction

Answer the following questions:

- Complete the following statement:
  - 1. The electronegativity in the modern table increases from ...... to ...... inside the same group.

- 2. Archaeopteryx represents the link between ...... and .......
- 3. The highest temperature layer in the atmosphere is ...... and the least temperature one is .......
- 4. The elements of group (7A) are called ...... while, elements of group (1A) are called ......
- B Locate the position of these elements in the modern periodic table :
  - $1._{19}K$

2. 15P

Question 2

- A Give reasons for each of the following:
  - 1. Water molecules is from the polar molecules.
  - 2. Stop building concord air planes.
  - 3. The dodo bird is an easy target to hunt.
  - 4. Alkali metals are kept under kerosene in the lab.
- B Calculate the Earth's temperature if the temperature is 2°C at 2km. high of a mountain.



- **A** Write the scientific term :
  - 1. The traces that indicate the activity of the living organism during their life.
  - 2. Two magnetic belts help in dispersing the harmful cosmic radiation away from the Earth.
  - 3. The block that contains the series of lanthanides and actinides.
  - 4. The places that are specified to protect the endangered species in the their natural environment.
- B Mention one difference between:
  - 1. Altimeter and aneroid (in the view of their usage).
  - 2. Simple and complicated ecosystem (in the view of their definition).

- Choose the correct answer :
  - 1. Meteors are burnt in ..... layer.
    - a. thermosphere
- b. mesosphere
- c. stratosphere
- 2. All of the following are endangered species except ......
  - a. Panda.

- b. Quagga.
- c. Rhinoceros.



3.	The	standard	atmospheric	pressure a	at the	sea l	level	is		Millibar.
----	-----	----------	-------------	------------	--------	-------	-------	----	--	-----------

a. 76

- b. 1013.25
- c. 130<del>0</del>
- 4. The element which its atomic number (18) is .......
  - a. transition element.
- b. inert gas.
- c. halogen element.
- 5. .... is used as a cooling substance in air conditioning sets.
  - a. Nitrogen oxide
- b. Halons
- c. Freon

#### B Correct the underlined words:

- 1. Rutherford discovered the main energy levels.
- 2. Petrified wood is considered from rocks.
- 3. Nonmetals oxides as considered basic oxides.

#### Write the chemical equation representing the following:

- 1. Dissolving of magnesium oxide in water.
- 2. The reaction of chlorine gas with potassium bromide.

### 25 El-Minia Governorate

Official Language Schools Direction

#### Answer the following questions:

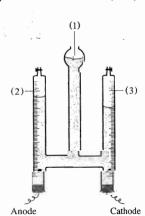
### Question 1

#### Note that $(\checkmark)$ in front of the right statement and (x) in front of the wrong one :

- 1. The chemical elements have been categorized in a table to ease its study.
- 2. Water and ammonia are from polar compounds.
- 3. Lithium is the most active metal in group (1 A).
- 4. Mesosphere is the coldest layer in the atmospherics envelope. (
- 5. The ozone layer permits the passage of all near and far ultraviolet rays.

# B The opposite figure, represents Hofmann's voltameter which is used in water electrolysis:

- 1. Write the chemical equation which expresser the reaction.
- 2. Calculate the volume of the gas that evolves at the anode if the volume of the gas that evolves at the cathode is 8 cm<sup>3</sup>.
- 3. What is the name of gas evolved at (Anode), (Cathode)



			Final Exams
Mention an example	e of each of the fo	llowing:	
1. Microfossils.	2. En	dangered plant.	•*
Question 2			
♠ Locate the position	of the following e	lements in the moder	n periodic table :
1. <sub>19</sub> X	2. <sub>10</sub> Y	7	3. <sub>14</sub> Z
(i) Give reasons for ea	ch of the following	3	/·
1. Mendeleev left ga	ps (empty slots) in	his periodic table.	
2. Sodium and potas	sium are kept under	surface of kerosene.	•
3. Ionosphere is imp	ortant for radio stat	ions.	
4. Dodo bird was an	easy target for hun	ters.	-
( What is meant by e	ach of the followin	0 =	
1. Rid lest.	2. <b>M</b> o		3. Water pollution.
Question 3			
Choose the correct	answer:		
1. The elements which	h occupy the middle	block (d) in periodic tal	ole are called elements
a. transition	h. alkali	c. alkaline Earth	d. noble
2. Elements of group	(7A) are known as	······	
inert gases.		b alkali.	
alkaline Earth n	netals.	d halogens.	
3. All of the following	ng diseases are caus	ed by biological pollut	ion except diseases.
a cancer	b bilharzia	c. hepatitis	d. typhoid
4. Ozone degree is m	neasured in a unit ca	alled	
a.km.	b. Dobson.	$c.mm^2$ .	d.nm.
5. Complete body fo	ssil of insects are fo	ound preserved in	
a. ammonites.	b. amber.	c. igneous rocks.	d. ambergris.
6. Chlorine replaces	····· in its salt sol	utions.	
iodine	fluorine	c. bromine	d. (a) and (c)

that temperature at a point of the ght 1000 meters above sea level if temperature at early out is 25°C.



#### Mention one difference between :

- 1. Metals and nonmetals.
- 2. Simple ecosystem and complicated ecosystem.

### Question 4

#### **A** Write the scientific term of each of the following:

- 1. The ability of the atom in covalent molecule to attract the electrons of the chemical bond towards itself.
- 2. A copy of the original internal details of a skeleton of once an old living organism.
- 3. The continuous decrease in the number of the same species of living organism without compensation, until they all die out.
- 4. They are elements which have properties of both metals and nonmetals.
- 5. It is the weight of air column of an atmospheric height on a unit area (1 m<sup>2</sup>).

#### B What happens when ...?

- 1. Absence of hydrogen bounds between water molecules.
- 2. Adding dil. HCl to a piece of copper.
- 3. Meteors move with very high velocity in Mesosphere layers.

#### Choose from column (B) what suits in column (A):

<b>(A)</b>	<b>(B)</b>
1. Panda.	a. Sidney Zoo
2. Passenger pigeon.	b. North America
3. Quagga.	c. Wadi Hetan
4. Tasmanian.	d. South Africa
•	e. Northeast China

### **⟨26**⟨

#### **Assuit Governorate**

Ministry of Education

#### Answer the following questions:



#### Write the scientific term :

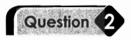
1. The curved lines that join the points of equal pressure in the atmospheric pressure maps.

- 2. A series in which metal are arranged in descending order according to their chemical activity.
- 3. The elements which occupy the middle block (d) in the periodic table.
- 4. Safe areas to protect species that face danger in their homeland.
- 5. It is the weight of air column of an atmospheric height on a unit.

#### **B** 1. Problem:

Locate the position of the following elements in the modern periodic table :  $_{10}$ Ne  $-_{19}$ K

- 2. Find the temperature at height 3 km above sea level if the temperature at sea level is 32.5°C.
- What's meant by ...?
  - 1. Water pollution.
- 2. Aurora.



- **A** Complete the following :
  - 1. Archaeopteryx represents the link between ...... and .......
  - 2. There are ..... bonds in water molecule, while there are .... bonds between water molecules.
  - 3. Mendeleev arranged the elements ascendingly according to ........ , while Moseley arranged them ascendingly according to ........
  - 4. Ultraviolet radiation has a ..... effect and the infrared radiation has a .... effect.
  - 5. Mixing of human and animal wastes with water is ..... pollution.
  - 6. Ozone degree is measured by a unit called ......
- B Show by symbolic chemical equation:
  - 1. Dissolving magnesium oxide in water.
  - 2. The reaction between chlorine and potassium bromide.
  - 3. Formation ozone gas in presence of ultraviolet rays
  - 4. Water electrolysis.
- **©** Mention the importance of : 1. Fossils.
- 2. Van allen betls.

- Sive reasons for each of the following:
  - 1. The lower part of stratosphere is suitable for flying aeroplanes.

- Z. Occurrence of the old extinction.
- 3. Liquid nitrogen is used in preservation of cornea of eye.
- 4. Water molecule is from polar compound.
- B Give one use for each of the following:
  - 1. Altimeter.
- 2. Halons.
- 3. Index fossils.
- 4. Mesosphere.

- A Choose the correct answer:
  - 1. Each period in the modern periodic table starts with ..... element.
    - a. metallic
- b, semi-metallic c, nonmetallic
- 2. Complete body fossils of insects are found preserved in ......
  - a. ammonites.
- b. amber.
- c. ambergris.
- 3. The strongest metal lies in group ........
  - a. 1B

- b. 1A
- 4. The ultraviolet rays which penetrate ozone layer is ......
  - a near.
- b. far.
- c. medium.
- 5. Elements of groups (17) are known as .......
  - a. alkaline earth metal. b. alkali metal.
- c. halogens.
- 6. All of the following are endangered species except ......
  - a. panda.
- 5 bald eagle.
- e quagga.
- B Compare (in a table) between:
  - 1. Basic oxide and acidic oxides.
- 2. Simple and complicated ecosystem.

### **Sohage Governorate**

Sohage Formal Language School

Answer the following questions:



- A Complete the following:
  - 1. Mendeleev arranged the elements according to ...... while Moseley arranged the elements according to .....
  - 2. The highest temperature layer is ...... and the least temperature one is ......

				Final Exams
	3. Archaeopteryx represen	nt the link between	and	. · · · · · · · · · · · · · · · · · · ·
	4. Elements of group (1A	ealled, wh	nile elements of g	roup (7A) called
0	Give reasons for each of	the following:		
	1. Pilots prefer to fly their	r planes in lower p	art of stratospher	e.
	2. The high boiling point	of water.		
	3. Sodium is <b>kept und</b> er s	urface of kerosene	·	( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )
	4. Element of the same gr	roup have similar p	properties.	
	Question 2			
	Write the scientific term	for each of the fo	ollowing:	
	1. It is the weight of air co	olumn of an atmos	phere height on u	ınit area.
	2. The element that have	the properties of b	oth metal and nor	nmetal.
	3. Continuous increase in	the average temper	erature of the Ear	th near surface air.
	4. The traces and remain	of living organism	s which kept in so	edimentary rocks.
	5. The apparatus which u	sed for electrolysis	s of water.	
	Locate the position of the	ne following elem	ent in modern ta	ble :
	1. Cl <sub>17</sub>	2. Ne <sub>10</sub>	3. Ca	20
	Calculate the temperate	re on the top of n	nountain of heig	ht 4 km. if the temperature
	。 2015年 - 新加速的學家 - 新二年的。			
	Question 3			
100 mg	Choose the correct ansy	· · · · · · · · · · · · · · · · · · ·		
	1. The scientist dis	scovered the main of	energy level.	
	a. Bohr	b. Rutherford	c. Moseley	
	2. ····· is acidic oxide.			
	a.CO <sub>2</sub>	b. MgO	○. Na <sub>2</sub> O	
	3. Meteors are formed in	····· layer.	-	
	exosphere	b. stratosphere	: mesosphere	
	4 used in food pre	eservation.		
	& Cobalt 60	b. Silicon slides	c Liquid nitrog	en

5. All of the following gases are greenhouse gases expect ......

 $b,O_{\!\!\!\!2}^{\scriptscriptstyle{\searrow}}$ 

CH<sub>4</sub>

 $d N_2O$ 

- 6. .... is example for complete body fossil.
  - a. Mammoth
- b. Radiolaria
- c. Foraminifera
- 7. Ozone layer is measured by unit called .....
  - a. Km.

- b. Dobson.
- $c. mm^3$ .

#### B Write the balanced chemical equation which represent the reaction of:

- 1. Magnesium with dilute Hydrochloric acid.
- 2. Sodium with water.

### Question 4

#### **A** Calculate the atomic number of the following:

- 1. Element located in the 3<sup>rd</sup> period and group 2A.
- 2. Element located in the 1<sup>st</sup> period and group 1A.

#### **B** Correct the underlined words:

- 1. The physical state of iodine is **liquid** state.
- 2. The strongest nonmetal element exist in **group 1A**.
- 3. The atomic radius is measure by **meter**.
- 4. Halon they are produce from burning fuel of ultrasound airplanes.

#### What is the important ...?

- 1. Aneriod.
- 2. Ozone layer.

#### **Qena Governorate**

Qena Directorate of Education

#### Answer the following questions:

### Question 1

#### Complete the following :

- 1. The temperature decreases by ...... at 2 km above Earth's surface.
- 2. The d-block contains ..... elements.
- 3. Element of group (7A) are called ......

### B What happens when ...?—

- 1. Passing of electric current through a Hofmann's voltmeter containing acidic water.
- 2. Dipping the old insect in amber.

### Question 2

- A Choose the odd word and mention the relation between the rest:
  - 1. <sub>12</sub>Mg / <sub>17</sub>Cl / <sub>20</sub>Ca / <sub>4</sub>Be
  - 2. Quagga / Dodo bird / Tasmanian cat / Bald eagle.
  - 3. Methyl bromide / Carbon dioxide / Water vapour / Methane gas.
  - 4. Silver / Sodium / Iron / Calcium.
- **B** Mention one example of : 1. Microfossils.
- 2. Endangered bird.



- A Put ( $\checkmark$ ) or (x), then correct the wrong one :
  - 1. 50% of the mass of the atmospheric envelope is present in the area between the sea level and 3km elevation. (
  - 2. Tropical forest is an example of simple ecosystem. ( )
  - 3. The world celebrates the ozone day in December of each year. ( )
  - 4. The elements with the same physical and chemical properties have been put in horizontal periods.( )
- **B** Write the balanced chemical equation for the following reaction :

Dissolving of magnesium oxide in water.



- A What's meant by ...?
- 1. Ionization.
- 2. Electronnegativity.
- **B** Mention the importance of each of the following:
  - 1. Coral fossils.
- 2. Ionosphere region.
- 3. Liquid sodium.



# 29

#### **Aswan Governorate**

#### Aswan Educational Directorate

d. rhinoceros.

d. basic

	Answer	the	follow	ing	questions	5
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Allswei gile following qu	Colonia .		
Question 1	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
A Complete the follow	ing statement :	-	
1. The highest temper	ature layer in the atmosp	here ······	
2. Halogens elements	lie in the group.		· · · · · · · · · · · · · · · · · · ·
3. Fossils are used in	exploration and de	etermining the age of	<u> </u>
4. Mendeleeve arrang arranged them asce	ed the elements ascendingly to	gly according to	, while Moseley
<b>B</b> Locate the position of	of the following element	ts in the modern per	iodic table :
1. <sub>3</sub> Li	2. <sub>18</sub> Ar		
Question 2			
<b>A</b> Choose the correct a	nswer :		
1. ····· protectorate	is the first established na	tural protectorate in l	Egypt.
a. Saint Cathrine	Ras Mohamed	. Wadi Hetan	Petrified fores
2. Each period in the	modern periodic table sta	arts witheleme	ent.
a. metallic	b semimetallic	nonmetallic	inert gas
3. All are greenhouse	gases except		
a. CO <sub>2</sub>	b. О <sub>2</sub>	e. N <sub>2</sub> O	d. CH <sub>4</sub>
4. Meteors burn in	······		
a. mesosphere.	b. ionosphere.	c. exosphere.	d. stratosphere.

B Illustrate with formulas only the role of an avioles radization in formation of ozone gas.

quagga.

nonmetallic

5. All of the following are endangered species expect .......

b. acidic

b. bald eagle.

a. panda.

a. amphoteric

6. Sodium oxide from ..... oxides.

- ( Mention one difference between each of :
  - 1. Flourine molecule and helium molecule.
  - 2. Simple and complicated ecosystems.

- Write the scientific term for each of the following:
  - 1. A bond that exists between water molecules.
  - 2. A bird with small wings and short legs extincted from the Indian islands.
  - 3. Elements that have both properties of metals and nonmetals.
  - 4. Safe places that are specified to protect the endangered species in their natural environment.
  - 5. A type of ultraviolet radiation that is absorbed completely (100%) in the ozone layer.
- B Write the chemical equations representing the following:
  - 1. Dissolving of magnesium oxide in water.
  - 2. The electrolysis of water.
- Give reasons for each of the following:
  - 1. Liquefied nitrogen is used in preservation of cornea of the eye.
  - 2. The lower part of the stratosphere is suitable for flying air planes.

Part - in front of the	gar statement	Cand Carrothyna is	Markey and the first first	e hilinda

- 1. The halons are produced from supersonic airplanes. (
- 2. The elements of group (1A) and (2A) are good conductors for heat and electricity. ( )
- 3. The ionosphere is surrounded by two magnetic belts known as Van alene's belt. ( )
- 4. There are fossils of complete insects kept in amber. ( )
- 5. Some alkalis dissolve in water forming bases.
- Mention one use for 1. Satellites. 2. Cobalt 60.
- Communicapeans in the Charalter stiepen is .
  - 1. Hunting the passenger pigeon in great numbers.
  - 2. Water is polluted by the wastes of man and animal.



# 30

#### **Matrouh Governorate**

#### Matrouh Educational Directorate

#### Answer the following questions:

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Quest	ion 🗨 🗩
- COCO	

450						
	Comple	ete	the	tolic	wing	:

- 1. The modern periodic table consist of ...... horizontal periods and ..... vertical groups.
- 2. From the extinct animals in the old ages ...... and ......
- 3. Sodium is kept under the surface of ...... so not to react with ......
- 4. The last level of metallic elements **contain** ...... than four electrons , while the nonmetallic elements contain ..... **electrons** in their last energy level.
- 5. Ultraviolet has ..... effect and the infrared radiation has .... effect.

#### B To who these works attributed:

- 1. The discovery that the nucleus of the atom contains positively charged proton.
- 2. The discovery of the existence of two magnetic belt around Earth planet.

#### Mention one difference between:

- 1. Mesosphere and thermosphere.
- 2. Alkali metals and alkaline Earth metal.
- 3. Ferns and coral fossils.

### Question 2

#### **A** Choose the correct answer:

- 1. The ..... is used in extinguish fire.
  - a. methyl bromide
- b. halons
- c. nitrogen oxide
- d. ultraviolet
- 2. The elements which its atoms number is 17 is similar in chemical construction to the elements which atomic number ........
  - a. 2

- b. 7
- c.9

d. 19

- 3. The metal oxides are ........
  - a. Acidic.
- b. basic.
- c. amphoteric.
- d. neutral.

- 4. There are ..... bond between water molecules.
  - a. metallic
- b. ionic
- c. hydrogen
- d. neutral
- 5. The volume of hydrogen gas evolving from water electrolysis equals ..... the oxygen volume.
  - a. that of
- b. double
- c. half

- d. four times
- B Write the chemical equation representing the following:
  - 1. Dissolving of magnesium oxide with water.
  - 2. Reaction between chlorine and potassium bromide.
- What is the important of ....?
  - 1. Altimeter.
- 2. Sodium.
- 3. Liquefied nitrogen.



- **A** Correct the underlined words :
  - 1. <u>The environmental system</u> are safe place which are specified to protect the endangered species in their natural environments.
  - 2. The trace is what the living organism leave <u>after its death</u> in sedimentary rocks.
  - 3. The dinosaurs are the most famous extinct kinds recently.
  - 4. Each period end with nonmetal.
- **B** If the temperature at the base of mount Everest is 20.6°C. How much is the temperature at its top if the mountain height is 8862 m?
- **©** Give the reason for :
  - 1. The dodo bird is easy target to hunt.
  - 2. The lower part of the stratosphere layer is suitable for airplanes flying.
  - 3. Water molecules is from the polar molecules.
  - 4. The bald eagle is the one of the endangered species.

At their the scientific term for the following

- 1. The continuous decrease in number of individual from same species of living organism without compensation with birthing.
- 2. A phenomenon occured due to increases the percentage of carbon dioxide and lead to an increase in temperature.
- 3. The fourth layer of the atmospheric envelope.
- 4. The ability of the atom in the covalent molecule to attract the chemical bond electron to it.
- 5. The block that contain the group from 3A to 7A.
- 1. Chemical activity series.
- 2. Index fossils.

What happens in the following situation .....?

- 1. Water is polluted by the wastes of man and animals.
- 2. Put a magnesium strip inside a test tube contain oxygen.
- 3. The drop of water temperature to 4°C.